BEST PRACTICES FOR TEACHING CORE COMPETENCIES TO BALDRIGE EXAMINERS IN STATE BALDRIGE PROGRAMS

A Dissertation

by

SANDRA ELOISE BROOKS

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

May 2010

Major Subject: Educational Administration

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Approved by:

Chair of Committee,	Bryan R. Cole
Committee Members,	Robert Burch
	John Hoyle
	Kelli Peck-Parrott
Head of Department,	Fredrick Nafukho

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ABSTRACT

Best Practices for Teaching Core Competencies to Baldrige Examiners in State Baldrige Programs. (May 2010)

Sandra Eloise Brooks, B.A., Vanderbilt University; B.S., Texas A&M University; M.S., Texas A&M University

Chair of Advisory Committee: Dr. Bryan R. Cole

The purpose of this study was to determine the core competencies needed by state Baldrige examiners, to identify best practices in examiner training programs provided by state Baldrige organizations, and to identify best practices for teaching core competencies.

A Delphi panel ranked core competencies, best practices, and best practices for teaching core competencies using a Likert-style survey. Descriptive statistics and a formula for determining consensus quantified the results.

The key findings of this study were that the Baldrige Criteria for Performance Excellence continue to provide the core competencies for which examiners need to be trained to effectively evaluate and score applications and provide meaningful feedback to applicants. The best practices for teaching core competencies, however, vary according to the needs of each state organization and the expertise and teaching styles of the trainers in the various state organizations. Coaching was the one best practice upon which the panel agreed as being applicable to teaching most of the core competencies. A template for

training examiners using the best practices for teaching core competencies was the outcome of this study.

Recommendations include using this template to train examiners and using the actual teams, of which the examiners will be a part, for evaluating and scoring the applications from receipt of the application through the life of the application. It is recommended that the individual review of applications be eliminated. As examiners will work with the actual applications from the beginning of the process, it is recommended that the case study be eliminated as pre-work. It is also recommended that coaches work with the actual teams from the training session until the feedback report is written.

DEDICATION

To my dearest son, Charles,

Whose presence illumines the world.

ACKNOWLEDGMENTS

I am most grateful to many who have supported me in this process. Please accept my gratitude for your support.

I recognize Dr. Bryan Cole for his concrete guidance and support. He made this project possible, and for this I am most grateful. Both in class as well as on this dissertation, he offered great acknowledgement and praise for my work, which carried me forward with enthusiasm.

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I recognize the members of my Delphi panel who made this project possible and are thus contributing to future Baldrige training programs by their contributions in this study. I appreciate their commitment, patience, and contributions.

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CHAPTER I

INTRODUCTION AND BACKGROUND

The Malcolm Baldrige National Quality Award program was established in 1987 to provide a set of research based criteria that organizations can use to assess and improve their organizational performance. The Criteria for Performance Excellence

> Have evolved significantly over time to help organizations address a dynamic environment, focus on strategy-driven performance, address concerns about governance and ethics and consider the key decisions driving both short-term success and long-term organizational sustainability. The Criteria have continually progressed toward a comprehensive, integrated systems perspective of overall organizational performance management. (Baldrige National Quality Program, 2009a, p. 27)

The Criteria are the basis for conducting organizational self-assessments, for making Awards, and for giving feedback to applicants. In addition, the Criteria have three important roles in strengthening U.S. competitiveness:

- to help improve organizational performance practices, capabilities, and results

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This dissertation follows the style and format of *The Journal of Educational Research.*

- to facilitate communication and sharing of information on best practices among U.S. organizations of all types
- to serve as a working tool for understanding and managing performance and for guiding organizational planning and opportunities for learning

Criteria for Performance Excellence Goals

The Criteria are designed to help provide organizations with an integrated approach to organizational performance management that results in

- delivery of ever-improving value to customers and
- stakeholders, contributing to organizational sustainability
- improvement of overall organizational effectiveness and capabilities
- organizational and personal learning. (Baldrige National Quality Program, 2009a, p. 49.)

Organizations complete an application that addresses all of the criteria items and the application is evaluated by expert quality examiners who provide feedback to the organization. The assessment is designed to identify strengths and opportunities for improvement that enable an organization to grow to performance excellence, while applicants are considered for an award based on their level of performance excellence. The majority of applicants complete the application in order to obtain the expert feedback from the highly qualified examiners and to use this feedback for organizational improvement.

There are more than forty active states and local programs based in states throughout the country. All of these programs are modeled to some degree after the Baldrige National Quality Program, and their award criteria are based on the Criteria for Performance Excellence (Baldrige National Quality Program, 2009a). Similar to the national program, state programs provide examiner training on the Criteria and in the evaluation and scoring process. Examiner training is critical to ensure consistency and equity across organizational assessment and that the Criteria are interpreted and applied with fidelity and integrity.

The present study provides the very first set of best practices in teaching the core competencies needed by examiners in state Baldrige programs. A core competency is a skill needed by examiners to effectively evaluate and score an application submitted to a state Baldrige program for evaluation and feedback of how effective an organization is in meeting the Criteria of the Baldrige standard for organization performance excellence. A best practice is an effective technique for training examiners. A best practice in teaching core competencies is an effective technique for training examiners a skill they need to effectively evaluate and score an application. This chapter provides an overview of the Baldrige process, which provides the basis for the present study. Fundamental to the Baldrige Criteria for Performance Excellence are its core values and key concepts which are discussed in Chapter II. Chapter I gives an overview of an integrated management model because the Baldrige process is one such model. Chapter II discusses integrated management systems in greater depth.

In 1987 during a slowing of the growth in the United States economy, President Reagan signed into law the Malcolm Baldrige National Quality Award to strengthen ties between government and business, to promote quality in process and results, and for winners to share successes in applying quality principles (Baldrige National Quality Program, 2009a; Vokurka, Stading & Brazeal, 2000). Research leading to the law indicated a correlation between quality and profit with poor quality resulting in fewer sales and decreased revenues (Baldrige National Quality Program, 2009a). Strategic planning, strong leadership, and a strong customer orientation are keys to quality and organizational success (Baldrige National Quality Program, 2009a). Organizations choose to apply for the award in order to improve their processes and reap the benefits in performance results.

The award, named for the Secretary of Commerce at the time, who died suddenly in a rodeo accident, provides guidelines through Criteria to help stimulate businesses to improve quality and productivity (Baldrige National Quality Program, 2009a; DeCarlo & Sterett, 1990; Stratton, 1990; Vokurka, 2001). The National Institute of Standards and Technology (NIST), an agency within the Department of Commerce, oversees the Baldrige program and selects examiners (Vokurka, 2001). Since its inception the Criteria have changed through self-assessments and continuous improvements (Vokurka, 2001). More scoring points are now placed on results than when the award was first established (Vokurka, 2001). The rationale for allocating more weight to the

results category of the Criteria is that quality processes lead to good performance results (Vokurka, 2001).

At the national level, for the last twenty years the Baldrige process has helped numerous organizations become successful by applying the Baldrige Criteria (Blazey, 2009). Organizations can use the Criteria to improve their performance without applying for national or state awards (Blazey, 2009). The National Institute of Standards and Technology (NIST) oversees the Baldrige National Quality Program (Baldrige National Quality Program, 2009a). NIST helps organizations improve their competitive strengths (Baldrige National Quality Program, 2009a). The American Society for Quality (ASQ) has a contract with NIST to administer the Award Program in accordance with its vision of a world where quality is practiced everywhere to make the world a better place (Baldrige National Quality Program, 2009a). The Department of Commerce, of which NIST is a part, appoints members to the Board of Overseers who serve as advisors for the program (Baldrige National Quality Program, 2009a). The Board of Overseers, comprised of leaders from many sectors, assesses the Criteria for continued relevance (Baldrige National Quality Program, 2009a).

Every year there are a few changes to the Criteria because of this continual evaluation process (Baldrige National Quality Program, 2009a). In this fashion the Baldrige program uses its Criteria to improve its own processes. The purpose of the current study is to help the state Baldrige organizations improve so that they can help other organizations improve. Specifically this study focuses

on the initial training of examiners prior to the independent review of an application.

The Board of Examiners reviews and scores applications and writes feedback reports (Baldrige National Quality Program, 2009a). The Panel of Judges is part of the Board of Examiners (Baldrige National Quality Program, 2009a). This panel decides based on the score assigned by the team of examiners whether an applicant will receive a site visit (Baldrige National Quality Program, 2009a). If there is no site visit, the feedback writer for the team prepares the final feedback report for the applicant (Baldrige National Quality Program, 2009a). If there is a site visit to clarify and verify questions from the application, the final feedback report is written after the site visit (Baldrige National Quality Program, 2009a). The Panel of Judges makes the award recommendations to the Director of NIST (Baldrige National Quality Program, 2009a). A requirement of winning the award is for the winner to share its best practices and quality strategies with other organizations (Baldrige National Quality Program, 2009a).

Baldrige principles focus on delighting the customer and offer a process approach to management (Blazey, 2009). Leadership plays a vital role for leaders set a clear direction for all in the organization to follow in implementing processes which lead to satisfied loyal customers and thus yield high performance results (Blazey, 2009). Continuous improvement based on measurement, rare twenty years ago, is now essential for sustainability (Blazey, 2009). CEO's routinely report the significance of the Baldrige Criteria in

enhancing business (Blazey, 2009). While strategic plans are common, the Baldrige Criteria stress deployment of the strategic plans which CEO's deem crucial (Blazey, 2009). The Criteria are designed for long-term success and immediate turn-arounds are not an inherent aspect of the Criteria (Blazey, 2009). While the Baldrige program began in the United States, over sixty other countries currently use the Criteria to increase the success of their organizations (Blazey, 2009).

Despite annual changes in the Criteria, the underlying framework for the Criteria, the core values, provide the unchanging philosophical foundation (Vokurka, 2001). The Baldrige Criteria for Performance Excellence derive the Criteria from the following core values and concepts: "visionary leadership, customer-driven excellence, organizational and personal learning, valuing workforce members and partners, agility, focus on the future, managing for innovation, management by fact, social responsibility, focus on results and creating value, and a systems perspective" (Baldrige National Quality Program, 2009a). These core values provide the basis for the specific questions which the Criteria ask the applicants to address.

The Baldrige Categories

There is an Organizational Profile followed by seven categories in the Baldrige National Quality Program and in the state programs which model their programs after the national one (Baldrige National Quality Program, 2009a). The categories consist of eighteen items with major requirements and additional

Areas to Address in which applicants provide detailed descriptions of their processes and results.

The first six categories pertain to processes while the last one pertains to results. The categories are leadership; strategic planning; customer focus; measurement, analysis, and knowledge management; workforce focus; process management; and results. These categories provide the questions which applicants answer in their fifty page applications which show their success in having processes which are deployed and integrated throughout their organizations and which align with their core business. Their performance results reflect well-defined, aligned, and integrated processes.

Organizational Profile

The Organizational Profile is a summary of the salient characteristics and strategic situation of an organization (Baldrige National Quality Program, 2009a). The Criteria emphasize its importance as a starting point for all levels of Baldrige applications and a means of identifying gaps in information (Baldrige National Quality Program, 2009a). Further, the Organizational Profile gives Baldrige examiners and judges an overview to help them better understand the organization (Baldrige National Quality Program, 2009a).

The questions addressed in the Organizational Profile have links to items within the other categories where they are discussed in greater depth (Blazey, 2009). For example, the Organizational Profile asks the applicant what its organizational structure and governance system are (Baldrige National Quality

Program, 2009a; Blazey, 2009). Organizational structure and governance is further addressed in Category 1 on Leadership (Blazey, 2009). The Organizational Profile is a synopsis of the application as it relays what is essential to an organization in a way that reflects the Criteria.

Category I – Leadership

Category I pertains to the way senior leaders guide their organizations (Baldrige National Quality Program, 2009a). This category includes organizational governance and social responsibility (Baldrige National Quality Program, 2009a). This category focuses on how senior leaders set visions and values, how they communicate with the workforce, and how they create a focus for organizational performance (Baldrige National Quality Program, 2009a). This category also focuses on organizational governance and legal and ethical behavior (Baldrige National Quality Program, 2009a). Leaders must apply the Criteria and be committed to personal leadership skills and the creation of future leadership (Blazey, 2009). Successful leaders communicate well, listen well to all stakeholders, and take action (Blazey, 2009). Leaders create the environment for engagement and empowerment of the workforce (Blazey, 2009).

Leaders provide vision and concrete guidance (Blazey, 2009; George, 1992). The quality leaders recognize that what they are doing is right; they have knowledge of what the customers need and how to provide those needs; and they have the quality teamwork throughout the organization to accomplish the goals (Blazey, 2009; George, 1992). This category links to all other process

categories, which shows the importance of leadership to an organization (Blazey, 2009).

Category II – Strategic Planning

Category II deals with the development and deployment of strategic objectives and action plans (Baldrige National Quality Program, 2009a). Additionally should a sudden change be needed, this category looks at how the organization plans for a sudden change (Baldrige National Quality Program, 2009a). This category also looks at how the organization measures its progress in achieving its plans (Baldrige National Quality Program, 2009a). Strategic planning begins by asking and answering a few fundamental questions such as what is our business; what do our customers want; what are our strengths and weaknesses; how do we stand in relation to our competitors; and what must the organization do to be a world class leader (Blazey, 2009; George, 1992). These questions begin with the most basic one of defining the nature of the organization's business and end with the question of how the organization can become a world class leader. Whether a company defines itself narrowly according to one product or more broadly according to general customer needs sets parameters in which the company functions (George, 1992). Companies which include all their customers' needs will provide quality goods and services and expand their businesses (George, 1992).

Organizations must first develop their strategies and then convert those strategies into action plans (Blazey, 2009). Measures for keeping tabs on the

plans and projected results are part of the deployment process (Blazey, 2009). With the availability of a strategic plan, workers know when there is adherence to it or deviation from it by a random act of improvement which does not align with the plan (Blazey, 2009). This category links to several other categories, especially the results category (Blazey, 2009).

Category III – Customer Focus

Category III pertains to the needs and expectations of customers markets (Baldrige National Quality Program, 2009a). Customer engagement and voice of the customer are vital (Baldrige National Quality Program, 2009a). Customer engagement strengthens ties to the organization while the voice of the customer gives form to the customer's view of the organization's products or services (Blazey, 2009).

This category asks questions about building relationships with customers to create customer satisfaction and loyalty (Baldrige National Quality Program, 2009a). There must be dialogue to know what the customer wants and expects as well as measures to determine the success of meeting those desires and expectations (Blazey, 2009; George, 1992). It is not simply the company's meeting the needs of customers that is crucial, but it is interpersonal relationships between customer and company that determine whether the customer will remain so (Blazey, 2009; George, 1992). In addition to simply meeting a customer's expectations a quality company will anticipate future customer needs and provide them (George, 1992).

Measures of customer satisfaction or dissatisfaction such as complaints offer improvement opportunities for the organization (Blazey, 2009). Where there is a diversity of customers, segmentation with different approaches to different groups of customers helps improve customer focus (Blazey, 2009). This category links to other categories including the results category (Blazey, 2009).

Category IV - Measurement, Analysis, and Knowledge Management

In Category IV the organization answers how it measures, analyzes, and improves data and how it manages information technology (Baldrige National Quality Program, 2009a). The organization must also answer how it uses its measures to self-assess and make improvements (Baldrige National Quality Program, 2009a). As George (1992) succinctly noted, “To manage quality you must measure it” (p. 71). Specifically, what matters most to the customer should be measured (George, 1992). Both internal and external measures are needed to help achieve goals (George, 1992). Measuring processes can catch glitches before the results stage (George, 1992). Organizations interested in quality measure processes and results (Blazey, 2009; George, 1992). Additionally, companies look at their competitors to gather data (Blazey, 2009; George, 1992). Systematic processes for measurement and analysis allow decision making to occur closer to the process affected (Blazey, 2009). Without systematic measurement and analysis, decisions may be based on the leadership’s intuition rather than fact (Blazey, 2009). This category is linked to

every other item in the Criteria as it is the *brain center* for aligning operations and strategic objectives (Blazey, 2009).

Category V – Workforce Focus

Category V looks at the alignment of the workforce with the organizational mission and strategic plan (Baldrige National Quality Program, 2009a). This category requires the organization to address the capability and capacity of its workforce in relation to becoming a high performing organization (Baldrige National Quality Program, 2009a; Blazey, 2009). Employees are resources and may be viewed as internal customers (George, 1992). Just as a quality company listens to and learns from its external customers, so, too does it listen to and learn from its internal ones. Maslow (1998) attested to the significance of individual creativity, which leads to self-actualization. Not only are employees valuable resources of an organization, they bring creative innovations to the processes they perform daily. The task of leadership is to systematically align human resources with company goals and strategies (Blazey, 2009; George, 1992). Management must design an environment which optimizes the contributions of creative, motivated individuals (Blazey, 2009; Maslow, 1998). George (1992) noted that the work environment must contribute to the individuals' safety and well-being. He added that individuals should be recognized for outstanding contributions. Teamwork within organizations is vital. As President Clinton commented when he presented the award in 1995: "It proves that there is a proper role for the nation's government in a limited

supportive way to help to create new economic opportunities, and most important, it shows that when we work together, we never lose" (Clinton, 1996).

A successful organization develops processes which empower employees to plan for and flow with change, which is always occurring in a dynamic organization (Blazey, 2009). The human resource planning of this category is included in the strategic plans of Category 2 (Blazey, 2009). This category links to the other categories for alignment of the organization.

Category VI – Process Management

Category VI looks at work systems and work processes as they relate to customer value and organizational sustainability (Baldrige National Quality Program, 2009a). The first step with regard to work systems is the design of the work system to deliver value to customers and stakeholders (Blazey, 2009). Process design relates to customer relationships and the ability to produce the design (George, 1992). After the design stage comes the production stage which requires measures for preventing and correcting mistakes (George, 1992). Prevention is a key characteristic of a quality system (George, 1992). Another element is reduction of waste including reduction of cycle time (Blazey, 2009; George, 1992). Just as cooking a great dish begins with great ingredients, so, too, does a quality product depend on quality components and dependable, timely delivery of those components from suppliers (George, 1992).

This category links to all the other categories in its role of managing the processes which make an organization successful (Blazey, 2009). This category

focuses on the efficient and effective application of an organization's core competencies (Blazey, 2009). Agility, one of the core values, is addressed in this category (Blazey, 2009). Agility means the ease and speed of response to change (Blazey, 2009).

Category VII – Results

Category VII presents results for all key areas and compares the organization's results to those of competitors (Baldrige National Quality Program, 2009a). This category looks at results for each of the preceding process categories (Baldrige National Quality Program, 2009a). Companies fill the results section of a Baldrige application with numerous graphs depicting trends, outcomes, and comparisons with competitors (George, 1992). The results category is weighted the most heavily on the scorecard because a company with quality processes in place will produce quality results.

Results can be divided into leading and lagging indicators of success where leading results predict other results and lagging results are indicators that follow other results (Blazey, 2009). For example, financial results lag while operational measures lead and thus help the organization predict customer satisfaction and financial performance (Blazey, 2009). These two polarities of leading and lagging results create balance and afford leaders the opportunity to take action in a timely fashion to create favorable results (Blazey, 2009).

The Baldrige Award Process

In order to gain an understanding of the role examiners play in the award process, it is helpful to look at the structure of the national award process on which the states model their programs. Potential examiners apply and are selected based on their Criteria category expertise, breadth and depth of experience, specialized experience, and examiner skills, knowledge, and abilities (Baldrige National Quality Program, 2009a). Potential examiners may have gained knowledge of the Baldrige Criteria through their work (Baldrige National Quality Program, 2009a). Examiner breadth and depth of experience refers to sector experience such as health care, education, or business (Baldrige National Quality Program, 2009a). Specialized expertise refers to special knowledge that is needed by the Program such as publications or relevant research (Baldrige National Quality Program, 2009a). Abilities in analyzing written material, working in teams, leading teams, and communicating effectively are also important (Baldrige National Quality Program, 2009a).

Examiner Training

Once selected for the national program, all examiners attend a three-day training program with new examiners attending one extra day (Baldrige National Quality Program, 2009a). The role of examiner training is to teach examiners how to evaluate and score applications to help organizations improve their processes and results. Training begins with the pre-work case study (Baldrige National Quality Program, 2009a). Through the case study in the examiner

training course, examiners learn the processes involved in the award cycle. The training includes a thorough study of the Criteria for Performance Excellence (Baldrige National Quality Program, 2009a). Examiners learn how to evaluate and score applications based on the Criteria-based responses of the applications (Baldrige National Quality Program, 2009a).

Examiners adhere to and sign a Code of Ethics. Appointments are for one year; thereafter, examiners are welcome to reapply (Baldrige National Quality Program, 2009a). The time commitment for a national award examiner is estimated to be at least 110 hours (Baldrige National Quality Program, 2009a). Although it is expected that there are best practices established in examiner training, there is a gap in the literature regarding this topic. However, the Baldrige National Quality Program does delineate the core competencies needed by examiners.

Core Competencies Needed by Examiners

Training in the Baldrige process is so important that those who have been selected as examiners but are unable to attend the training session may not become examiners (Baldrige National Quality Program, 2009a). The training includes a thorough review of the Criteria for Performance Excellence, instruction in evaluating and scoring an application as an independent reviewer, instruction in the consensus process in which individuals come together to form a team to evaluate and score an application, a review of the site visit process,

and an explanation of the Code of Conduct, which examiners sign (Baldrige National Quality Program, 2009a).

The Baldrige Criteria for Performance Excellence derive the Criteria from the following core values and concepts: “visionary leadership, customer-driven excellence, organizational and personal learning, valuing workforce members and partners, agility, focus on the future, managing for innovation, management by fact, social responsibility, focus on results and creating value, and a systems perspective” (Baldrige National Quality Program, 2009a). These core values provide the basis for the specific questions which the Criteria ask the applicants to address. These core values also provide the underlying foundation for the survey questions in this study.

The Examiners’ Role in the Award Cycle

The first step in the review of the application is the independent review in which examiners analyze and score an application individually (Baldrige National Quality Program, 2009a). Following the independent review is the team consensus and possible site visit (Baldrige National Quality Program, 2009a). The final product, which is delivered to the applicant, is the feedback report which provides insights regarding progress in the applicant’s journey in performance excellence (Baldrige National Quality Program, 2009a). The award cycle ends with the annual award ceremony where the President of the United States presents the Malcolm Baldrige National Quality Award to that year’s recipients.

The Relationship of the National Program to the State Programs

As the national program gained more recognition, states began to establish their own quality awards with most states basing their award programs on the national program. Over the last seventeen years the number of states which have quality award programs has increased from fewer than 10 to close to 40. The present research looks at these state programs which have the greatest number of national award winners to glean best practices with regard to the training of examiners.

The Baldrige National Quality Program encourages and supports Baldrige-based state programs. State programs are key stakeholders in the national program providing both examiners and applicants to the national program (Baldrige National Quality Program, 2009a). Reciprocally, the national program refers potential examiners to state programs (Baldrige National Quality Program, 2009a). State program directors are invited to become national examiners (Baldrige National Quality Program, 2009a). Additionally, the national program provides staff from its Outreach and Communications Team to help with collaborations with state programs (Baldrige National Quality Program, 2009a).

The websites for the state programs cite their use of the Baldrige National Quality Program as a model. All programs structure their award processes on the Baldrige Criteria, and all are dedicated to increasing performance excellence in their states. Variation occurs as the states create their own programs for the particular state needs and resources. The websites list examiner training

programs; however, the examiner training programs vary in process and scope. The amount of time allocated for examiner training and the number of examiners on the teams vary among the states. The state programs have similar selection processes for examiners; however, examiner applications vary from approximately two to twenty pages. Examiners must sign a Code of Ethics, which is important at the state and national levels. Examiners must acknowledge that there is no conflict of interest with respect to the specific applicants to which they are assigned. Confidentiality is essential at both the state and national levels. With such an extensive network of Baldrige-based programs, it is important to consider the underlying framework for these organizations.

Structural Framework – An Integrated Management System

This chapter provides an overview of an integrated management system as it serves as the structural framework for the Baldrige process. Chapter II expands the topic of integrated management systems as they relate to the Baldrige process. The Baldrige framework is an integrated management system. Baldrige examiners learn to think from a systems perspective. Systems thinking provides the conceptual framework for applying an integrated management system. An integrated management system without systems thinking is hollow. An integrated management system seeks perfection via ". . . a constant process of iterative experimentation, measurement, and adaptation. . ." (Lee, Shiba & Wood, 1999). It performs this process by examining the relationships among its interdependent components.

In addition to examining relationships among component parts, an integrated management system such as Baldrige optimizes the performance of each of the components (Blazey, 2009). Blazey (2009) used the analogy of baking a great cake, in which the proportions, cooking time, and temperature must be right. Additionally, high quality ingredients are needed to create a delicious cake. Attention to every aspect of the cake produces a great cake. The Baldrige Criteria are the recipe for producing award winning performance (Blazey, 2009). Every segment of the Baldrige integrated management system is needed to create the highest performance levels (Blazey, 2009).

Baldrige-based programs are sometimes referred to as total quality management systems. Lee, Shiba and Wood (1999) describe the relationship of integrated management and total quality management (TQM) as follows: “First introduced in Japan as an outgrowth of the methods taught by W. Edwards Deming, TQM is a philosophy that encompasses the general practices of integrated management” (p. 12). The following describes the integrated management system and places it within the broader framework of systems thinking.

An integrated, systemic management system acts on inputs and monitors processes between and among the components of the system while honoring the relationships in and among personnel (Birnbaum, 1988; Cole, B., class lecture, EDAD 622, Summer 2005; Deming, 1994; Quality Texas Foundation, 2007). Components of the Baldrige integrated management system comprise leadership; strategic planning; customer focus; measurement, analysis, and

knowledge management; workforce focus; process management; and results. (Baldrige National Quality Program, 2009a). Organizations which adopt this framework put leadership in the first position because leadership plays a crucial role in the proper alignment and functioning of the other components. Leadership (Category 1) determines the direction an organization takes (Blazey, 2009). Leadership must assess organizational capacity and capabilities including those of the workforce as well as partners and suppliers (Blazey, 2009).

There are relationships between leadership and each other component. For example, leaders listen to input from stakeholders to inform strategic plans. As leaders develop strategic plans (Category 2), they are setting the course for the organization and setting performance goals (Blazey, 2009). Leaders must create a clear strategic plan indicating the people and processes needed to fulfill it (Blazey, 2009). Otherwise, if the strategic plan is weak, various other plans from subordinates will be substituted and the result will be multiple plans that may be at cross-purposes with each other (Blazey, 2009).

Meeting the needs of the customers (Category 3) is essential to performance results (Blazey, 2009). Without satisfied customers organizations collapse (Blazey, 2009). In order to keep customers satisfied and meet performance goals, organizations must gather data, analyze it, and manage the knowledge (Category 4). An integrated management system makes decisions based on fact (Blazey, 2009). The data that are measured provide the facts needed for sound decisions (Blazey, 2009).Process feedback is vital for flexible,

responsive decisions to optimize customer service and achieve the vision, mission, and goals of the organization. Such process feedback helps the organization become a learning organization.

Leadership must decide which processes to monitor for feedback as the monitored processes are the ones which receive the most attention (Birnbaum, 1988). Internal feedback might come from the human resources component such as faculty complaining about a new policy. External feedback might occur in the form of new legislation which influences university policy. As another example, clients of the university, such as students and parents, inform university officials of their needs.

Engaged workers (Category 5) are the resources of an integrated management system. Engaged workers are willing, skilled, and knowledgeable (Blazey, 2009). Bureaucracy can stifle work and create unnecessary delays (Blazey, 2009). Skilled workers need the freedom from such barriers to perform their work efficiently and produce optimum results (Blazey, 2009).

The best, most skilled workers will be unable to produce optimum results without efficient processes (Category 6) for actualizing the results (Blazey, 2009). Furthermore, processes which are initially efficient become inefficient without monitoring, measuring, and refining (Blazey, 2009).

Finally, an organization achieves results (Category 7) with regard to performance levels, trends, comparisons, and links throughout the organization as well as links to the external environment. The results that are produced must have value for the customers in order for the organization to succeed (Blazey,

2009). Value may be measured in any number of ways such as profitability, usefulness, reliability, or durability (Blazey, 2009).The value of the present study is to contribute a set of best practices in teaching core competencies and thereby close a gap in the literature and provide a practical examiner training template.

Problem Statement

Significant variation of examiners' scoring of Baldrige applications exists and may influence deserving applicants from receiving site visits (Plunkett, 2006). Variation among state Baldrige programs may indicate areas where the state programs digress from basic Baldrige principles and where training of examiners differs in breadth and depth. By discovering the best practices among state Baldrige programs, these organizations can increase their effectiveness, efficiency, consistency in evaluating applications and providing actionable feedback, and greater consistency in awarding those applicants which most deserve the award for performance excellence (Plunkett, 2006).

In particular, where differences occur in the training programs for examiners in the various state Baldrige organizations, variation may also occur. Potential sources of variation in the examiner training process include the proportion of new examiners relative to experienced examiners, the average number of years of experience which senior examiners have, the sector experience of examiners, scoring consistency among examiners and teams, the methodology of the training program, the curriculum of the training program, the

delivery modality of the training program, the experience of the instructors, and the quality of the application.

Research Purpose

The purpose of this research is twofold: to determine the core competencies needed by state Baldrige examiners and to identify best practices in examiner training programs provided by state Baldrige organizations in order to develop a set of best practices for teaching core competencies, which any Baldrige organization will find useful.

Research Questions

1. What are the core competencies needed for state Baldrige examiners?
2. What are the best practices in examiner training programs provided by state Baldrige organizations?
3. What are the best practices for teaching the core competencies?

Methodology

In order to identify the core competencies and best practices from the Baldrige based state organizations, the researcher utilized input from a panel of experts, a Delphi panel. These experts anonymously answered a survey. After the first round of questions, the researcher, using suggestions from the

respondents, revised the survey questions to incorporate the Delphi panel thinking and expertise and to establish a comprehensive listing from which to gain consensus. The Delphi Method is discussed in greater depth in Chapters II and III.

Study Panel

The experts comprising the panel were the selected instructors for the various state training programs for examiners. Initially the researcher sent a letter to the directors of the state Baldrige programs with the greatest number Malcolm Baldrige National Quality Award winners requesting the names of two highly qualified expert instructors from each training program (Appendix A). These expert instructors had to fulfill the following requirements: they must have served as instructors for at least three years; they must have served as either a feedback writer or team leader for at least one year; they must have served as either a state or national level Baldrige examiner for at least two years; and they must have been on at least one site visit. Because of their varied experience and careers, these expert instructors offered a variety of professional and personal experiences and perspectives to enrich the process and the outcome. They will benefit from the outcome as the set of best practices for teaching core competencies that they have helped design by their responses will serve them in their future training of examiners.

Description of the Survey

The study had four rounds of items (Appendices B – E). The first round of items addressed the core competencies needed for an examiner and the general best practices for training examiners. The second set of questions sought consensus from the expert panel regarding the core competencies and general best practices in the training programs. Additionally, round two also included additional core competencies and best practices added by the panel. The third round of questions sought consensus on the added core competencies and best practices, and included a table of best practices related to teaching core competencies. The third round enabled the panel to move toward establishing best practices for teaching core competencies. The fourth (final) round of questions sought consensus for those core competencies and best practices that had not yet reached consensus. The fourth round also asked the panel to rank the best practices for teaching core competencies.

In this way, a synthesis of core competencies needed by examiners and the best way to teach those core competencies emerged. In order to create a focus for the survey, the researcher provided a base set of questions with room for additional comments from the Delphi panel. A four point Likert-type scale was used to assess the importance of each item.

As an example, the experts rated the importance of core competencies such as writing key factors, writing comments, and scoring in the first round of questions related to core competencies of examiners. In addition, another set of fundamental items helped focus the panel on general best practices in the

training program. For example, best practices might include the teaching of the process components of approach/deployment/learning/integration (A/D/L/I) or the results components of levels/trends/comparisons/linkages/gaps (Le/T/C/Li/G).

Scheibe, Skutsch and Schofer (2002) argued the importance of having equal distances between the values on the Likert-type scale so that the data will be interval data. An interval scale indicates the degree to which one item is preferred over another. However, because of the subjective nature of the responses, it is not possible to have equal distances between the values. Some responses might even require additional qualitative comments by the experts.

Administering the Survey

The survey was emailed to the respondents. Respondents returned the surveys within four weeks. Responses were checked to determine which ones already achieved consensus. Consensus is reached when there is less than a 15% change in responses (Scheibe, Skutsch & Schofer, 2002). If the change in responses was at least 15%, the questions remained for another round. In accordance with the Singer-Churchmanian IS and systems thinking, respondents contributed to the phrasing of questions for rounds two, three, and four. Within two weeks of receiving the first round of responses, the researcher emailed the second round of surveys to the panelists. The third and fourth rounds proceeded in the same fashion with some time off for summer and winter breaks.

Data Analysis

SPSS, a statistical analysis software program, provided descriptive statistics on the responses for the Likert-style responses. In rounds two, three, and four the respondents knew the rank for each of their own questions as well as the group mean and standard deviation for each question. Respondents chose whether to change the rank of any of their answers.

Operational Definitions

For this study, the following operational definitions have been adopted.

- **Best practice**: An effective technique for training examiners. It answers the question ‘how’ and describes a process.
- **Best practice in teaching core competencies**: An effective technique for training examiners a skill they need to effectively evaluate and score an application, a process for actualizing an outcome.
- **Core competency**: A skill needed by examiners to effectively evaluate and score an application. It answers the question ‘what’ and describes an outcome.
- **Consensus**: Agreement of responses with less than 15% change in response (Scheibe, Skutsch & Schofer, 2002).
- **Delivery modality**: The approach used by the examiner training instructors to convey the information. This definition includes the

amount of time allocated for pre-work and training as well as the manner of communicating the information.

- **Site visit**: A visit by the examiner team to the applicant's business for a period of several days in order to verify and clarify any uncertainties in the application. Site visits are often awarded on the basis of the number of points scored during the consensus meeting of the team.

Significance of the Study

After the compilation of a set of core competencies and a set of general best practices in the state Baldrige examiner training programs as agreed upon by the Delphi panel of experts, a set of best practices specific to the teaching of core competencies in the state Baldrige examiner training programs emerged. This set of best practices for the teaching of core competencies informs trainers of state Baldrige organizations as to the consensed upon best practices for teaching core competencies to examiners. By incorporating the best practices based on Baldrige core concepts and values from the leading state Baldrige agencies, trainers can use this set of best practices for teaching core competencies as a unifying model to strengthen any Baldrige program – state or national – which chooses to use it. Consequently, non-valued added variation in the examiner training process may be minimized thus providing more consistency in evaluating applications and better feedback to applying organizations to help them increase their performance excellence.

CHAPTER II

REVIEW OF THE LITERATURE

With an aim to improve the initial training program for state Baldrige examiners, the present study examined literature related to Baldrige practices and philosophy. Baldrige programs subscribe to systems thinking, so the literature review begins with the philosophical foundation of systems thinking. As the present study used a Delphi panel, the philosophical basis of the Delphi method is presented. Next, Baldrige principles are discussed followed by a discussion of the fourteen state Baldrige programs which participated in the study.

Theoretical Foundation

Systems Thinking

Without the conceptual framework of systems thinking, an integrated management system runs the risk of becoming mechanistic and reductionistic rather than holistic. Systems thinking requires stepping outside a system to view it much as the astronauts are able to view Earth in its wholeness. Earth may be considered a system. The system of the Earth resides within the larger system of the solar system, which resides with the larger system of the Milky Way Galaxy. Systems have environments and the environments form systems which

encompass the original systems (Ackoff, 1974). Engaging both analysis and synthesis, systems thinking is expansive and holistic.

Systems thinking employs the *gestalt* principle that the whole is greater than the sum of the parts. The definition of *system* reflects this *gestalt* principle. Ackoff (1971) and Deming (1994) defined a *system* as a set of interconnected components. Deming added that every system has an aim, and the aim includes the future. Gharajedaghi (1999) added that the components of a system have freedom of choice. Gharajedaghi explained that the dominance of analytical thinking over the last several hundred years is yielding to systems thinking, which developed in the last half of the 1900's. Just as analytical thinking revolutionized organizational and individual thinking during its era, systems thinking represents an evolutionary leap in consciousness or what Gharajedaghi refers to as a paradigm shift.

Gharajedaghi (1999) offered the following:

> But chaos and complexity are not characteristics of our new reality; they are features of our perceptions and understanding. We see the world as increasingly more complex and chaotic because we use inadequate concepts to explain it. When we understand something, we no longer see it as chaotic or complex. (p. 25)

Using the right mental model makes simple what was complex (Senge, 1990). Systems thinking provides the mental model for understanding the complexity of organizations. Checkland (1994) classified systems thinking as a metadiscipline because it introduces a mode of thinking which can be used in

any discipline. Systems thinking includes analysis, but rather than treating the variables as independent such as a purely analytical approach does, it looks at the interdependence, the relationships between variables, and integrates the findings into a unified conclusion. Upon analysis, one finds that water comprises hydrogen and oxygen; however, the nature of water is a property of the whole and is vastly different from either of the elements which form it (Checkland, 1994).

Whereas Checkland (1994) classified systems thinking as a metadiscipline, Gharajedaghi (1999) proposed that systems thinking results in a dual paradigm shift. He explained the two categories of a paradigm shift: Either reality changes or the method of inquiry changes. When both categories occur there is a dual shift. He argued that the reality shift occurs by changing the concept of an organization from a biological model to a sociocultural model. An earlier shift occurred when organizations changed from a mechanistic to a biological model. With respect to the method of inquiry, Gharajedaghi cited the change from analytical thinking with its emphasis on independent variables to holistic thinking with its emphasis on interdependent variables. He termed the sociocultural organizations *multiminded systems.* Multiminded systems differ from biological or mechanical systems in that their members are purposeful and have freedom of choice (Gharajedaghi, 1999). Freedom of choice includes the freedom to choose an evolutionary direction (Banathy, 2000; Hubbard, 2001). That is, systems thinking advances conscious guidance of the evolutionary process (Banathy, 2000).

As mentioned, an important property of systems thinking is the focus on relationships between and among system components (Ackoff, 1974; Banathy, 2000; Checkland, 1974; Deming, 1994; Gharajedaghi, 1999; Senge, 1990). In addition to the focus on internal components, systems thinking brings awareness of the place of a system within a larger system, as in the example of Earth and its place in the solar system (Ackoff, 1974; Gharajedaghi, 1999). One can study various components of the Earth, and one can also study the Earth's relationship to the solar system. By studying the role of an organization within a larger system, one stays abreast of changes that affect the system that might go unnoticed if one is focused only on the processes internal to the organization. With respect to an integrated management system, interrelationships between and among system components and between the environment and the system are dynamic and must be studied continually. Ackoff wrote, "Furthermore, a system's performance depends on how it relates to its environment. . . " (1974, p. 15).

As noted earlier, the environment forms a larger system encompassing the original system (Ackoff, 1974). Ackoff defined *environmentalization* as "the process of putting into a system's mind its relationship to the whole of which it is part. It is the converse of humanization in which a system's relationship to its parts are [*sic*] put into its mind" (p. 55). Ackoff believed that both humanization and environmentalization are vital to systems. An aspect of humanization salient to integrated management is that of the objectives of the organization matching

the objectives of its members. Such a match leads to Deming's (1994) belief in finding joy in work and Senge's (1990) notion of a learning organization.

Gharajedaghi (1999) claimed that social systems are bonded by the exchange of information just as mechanical systems are bonded by the exchange of energy. Social learning, or shared learning within a culture, plays a vital role in increasing organizational capacity (Gharajedaghi, 1999). Senge (1990) addressed the need for individual and organizational learning as being vital to systems thinking. The learning organization continually and purposefully renews itself (Gharajedaghi, 1999; Senge, 1990).

Systems thinking requires what Senge (1990) referred to as metanoia, a shift in thinking. This shift entails openness and the ability to view the organization from the perspective of an objective outsider (Senge, 1990). Moreover, this shift in thinking results in one's learning to view one's own thoughts as a witness. Once one is free from enmeshment in one's own thoughts and beliefs, one is free to choose one's thoughts and beliefs. The daily discipline of self-examination is a time-honored spiritual practice, which Senge called the discipline of self-mastery. Senge insisted that serious systems thinkers must practice disciplined self-mastery in order to sustain a holistic organization. The practice of self-examination parallels the approach used in an integrated management system to study processes with the aim of improving the system.

Systems thinking requires conscientious planning for the future and making conscious choices (Ackoff, 1974; Banathy, 2000; Checkland, 1994;

Deming, 1994; Gharajedaghi, 1999; Senge, 1990). For millennia, evolution has proceeded unconsciously. Humans are now capable of guiding the evolutionary process (Banathy, 2000; Hubbard, 2001). That is, humans participate in conscious evolution (Banathy, 2000; Hubbard, 2001). This concept has importance for an integrated management system with feedback loops that monitor processes and call for adjustments in order for the system to continuously adapt. Having a plan to adapt instead of the more common technique of simply reacting to the market is a hallmark of systems thinking. Another hallmark of systems thinking is circular thinking.

Instead of the typical, linear cause-effect relationship that characterizes analytical thinking, systems thinking acknowledges the temporal and/ or spatial gap between cause and effect (Birnbaum, 1988; Gharajedaghi, 1999; Senge, 1990). This type of thinking also emphasizes the conversion of effect to cause (Birnbaum, 1988; Gharajedaghi, 1999; Senge, 1990). In another case, there may not be an initial causal connection, but later such a connection may develop. For example, there may be a communication loop without a causal loop between certain components at a particular time. Later the relationship may develop into a cause-effect relationship. Hence, systems thinkers employ circular loops to bring clarity to relationships among the interdependent components of a system (Banathy, 2000; Birnbaum, 1988; Senge, 1990). This aspect of systems dynamics has relevance for the integrated management system as causal and communication loops are built into it. In the analytical, reductive model, problem solving, based on a cause-effect relationship, is linear.

In the systems model, planning for the future and problem solving form a circular loop (Ackoff, 1974). The integrated management system, for example, uses feedback from complaints and problems to modify or restructure system processes.

Even though the parts of a system are interdependent, Gharajedaghi (1999) advised designing systems in a way in which all the components operate independently by managing themselves while being part of the collective decision making body for the whole system. This suggestion is similar to Birnbaum's (1988) cybernetic institution in which the various departments of a university act independently while still coming together to act as a unified entity.

Ackoff (1971) and Gharajedaghi (1999) discussed purposeful systems of which the ideal seeking system is the preeminent one. Gharajedaghi developed five principles which are essential to purposeful systems. The principles of openness, purposefulness, multi-dimensionality, emergent property, and counter-intuitiveness form what Gharajedaghi has called the building blocks required to become a systems thinker. Open systems, such as social systems, have exchanges between the environment and the system. For example, suppliers provide materials from the environment to an organization. Smooth functioning of an organization demands a predictable supply of needed materials which the organization uses to turn into outputs, which it furnishes to the environment.

In an open system, using a systems approach, Gharajedaghi contended that leaders manage upwards by influencing others and appreciating people and

processes that one cannot influence. Deming (1994) also referred to appreciation of the system. The notion of appreciation represents a different attitude than the notion of analyzing a system with the purpose of finding what is wrong. In systems thinking appreciation of the whole is vital.

Purposefulness, Gharajedaghi's (1999) second principle, embraces the notion of choice. Ackoff (1974) referred to this concept of choice as redesigning the future, while Deming (1994) included the concept of purposefulness as integral to his definition of a system. Ackoff extended the notion of freedom of choice to the freedom that members of an organization have. The members as well as leadership choose to continuously improve the system to create a learning organization (Ackoff, 1974; Senge, 1990).

Banathy (2000), Checkland (1994), Hubbard (2001), and Senge (1990) extended the idea of freedom of choice to the growth of self-consciousness. Checkland wrote, "The consequence of self-consciousness is that the human being is irreducibly free; he has genuine freedom of choice in selecting his actions" (1994, p. 116). Ackoff (1974), Banathy (2000), Gharajedaghi, (1999), Hubbard (2001), and Senge (1990) expanded the notion that self-conscious individuals meaningfully create their futures to the notion that learning organizations design purposeful futures. In accordance with systems thinking, Banathy noted that people cannot fix problems when immersed in them. Only when people transcend that state can people create scenarios for the desired future and make plans for attaining that future (Banathy, 2000). Ackoff (1971) and Gharajedaghi (1999) wrote about purposeful systems, which can change

goals and the means to attain those goals. Gharajedaghi (1999) elaborated on this idea in his discussion of choice.

Gharajedaghi (1999) divided the notion of choice into three dimensions: rational, emotional, and cultural. Rational choice pertains to self-interest; emotional choice pertains to beauty and excitement; and cultural choice pertains to ethical, societal values (Gharajedaghi, 1999). It is often cultural values which drive a system (Gharajedaghi, 1999). Gharajedaghi wrote, “However, by dictating the default values, culture has a profound impact on the decision process” (p. 35). He continued,

> Purposeful systems are value-guided systems; in other words, values are what purposeful behaviors strive to achieve. More often than not, these values are implicit in the culture, and the decision maker is not even aware that she or he has a choice. (Gharajedaghi, 1999, p. 36)

Albeit exceptions to value-based organizations exist, choosing unethical, self-interested choices may lead to the demise of organizations which make such choices in disregard for appreciation of the whole, one of the underpinnings of systems thinking.

With respect to self-interest, Gharajedaghi meant that decision makers base their choices on self-interest. When self-interest and ethics overlap, decision makers make wise choices (Gharajedaghi, 1999). Adding emotion to the mix provides the driver of excitement such as the excitement of a challenge or the beauty of a well-designed system.

Gharajedaghi (1999) stated that the principle of multidimensionality is one of the most powerful of the systems principles. He defined *multidimensionality* as "the ability to see complementary relations in opposing tendencies and to create feasible wholes with unfeasible parts" (Gharajedaghi, 1999, p. 38). Multidimensionality demonstrates the gestalt principle inherent in systems thinking. The ability of an organization to address its multidimensionality has relevance to the integrated management system. One way to work with multidimensional relations is to assess the strength of coupling between various system parts. Birnbaum (1988) used *tight coupling* to refer to a strong link between components and used *loose coupling* to refer to a small link where one component acts fairly independently of another to which it is loosely coupled. It is often hard to assess the impact of one component on another when there is loose coupling or when the cause and effect are temporally or spatially distant (Birnbaum, 1988; Gharajedaghi, 1999).

System components present one tier while relationships between components present another tier that brings forth emergent properties, properties that belong to the system as a whole (Gharajedaghi, 1999). These properties, such as love, happiness, and success cannot be analyzed or measured and are thus often overlooked (Gharajedaghi, 1999). Another facet of emergent properties is their continuous, spontaneous reproduction by the dynamic interactions of the system components (Gharajedaghi, 1999). Emergent properties create a resonance which may be much greater than the sum of the parts – the *gestalt* of the organization.

Gharajedaghi's (1999) final principle is counter intuitiveness, by which he intended that actions meant to produce one result may produce the opposite. Thinking in loops, as Birnbaum (1988), Richmond (1993), and Senge (1990) proposed, clarifies why the actual results happened. Richmond considered thinking in loops as empowering because people look within the system to find the problem rather than blaming an external cause. As Birnbaum (1988) and Gharajedaghi (1999) highlighted, time may play an important role. Furthermore, cause and effect may switch places due to the circular nature of system processes (Birnbaum, 1988; Gharajedaghi, 1999; Senge, 1990). Birnbaum offered the following example in the university setting: The excellent professor/ student ratio attracts more students to the university leading to a less favorable professor/ student ratio. As students become dissatisfied with the less favorable ratio, enrollment drops. The initial excellent ratio caused the increased enrollment (the effect); the increased enrollment subsequently caused dissatisfaction leading to decreased enrollment (the new effect). This trait of systems thinking has relevance for the integrated management system as it enables system designers to monitor and study results and then modify them when they are different from intended results.

Constructing the right mental model for the situation in conjunction with writing scenarios can create new vistas for an organization. These visions, when shared, can be the driving forces for organizational change (Hoyle, 2007; Senge, 1990). In a similar vein, Banathy (2000) wrote that the ideal inspires us and draws us to it. Hoyle (2007), Banathy (2000), and Senge (1990) appreciated the

power of creating scenarios as though the future is already happening. Such scenarios empower one to create the ideal system (Banathy, 2000). In the integrated management system, scenarios are preludes to strategic planning.

Philosophical Foundations of the Delphi Method

Mitroff and Turoff (2002) discussed several philosophical systems underpinning the Delphi method. They referred to each philosophical system as an Inquiring System (IS) (Mitroff & Turoff, 2002). They believed the following philosophies shape the Delphi method: the Leibnizian IS, the Lockean IS, the Kantian IS, the Hegelian (Dialectical) IS, and the Singer-Churchmanian IS (Mitroff & Turoff, 2002). In the Leibnizian IS, one deduces truth from theory (Mitroff & Turoff, 2002). According to the Lockean IS, one induces truth through experience (Mitroff & Turoff, 2002). This system, then, diametrically opposes the Leibnizian IS. The Lockean IS is well suited for communication which serves the purpose of reaching consensus (Mitroff & Turoff, 2002). As the present study uses communication to arrive at consensus, the Lockean IS seems appealing.

The Kantian IS presents a balance between the Leibnizian and Lockean philosophies because of its synthesis of theory and experience (Mitroff & Turoff, 2002). Because of its synthesis of theory and experience, the Kantian IS is appealing as a philosophical foundation for the present study. The Hegelian IS synthesizes a plan and counter plan in an effort to serve the whole system (Mitroff & Turoff, 2002). Because of its emphasis on the whole system, the Hegelian IS is also appealing.

It is, however, the Singer-Churchmanian IS which best aligns with systems thinking so that the methodology aligns with the theoretical foundation. Specifically, the Singer-Churchmanian IS is a pragmatic, goal-oriented method in which participants create several alternative ideas (Mitroff & Turoff, 2002). This IS takes into account the present and the future in its holistic view of a system (Mitroff & Turoff, 2002). This IS additionally addresses ethics, which plays a role in systems thinking. Because of its alignment with systems thinking, the Singer-Churchmanian IS provides the most appropriate philosophical foundation for the present study. Mitroff and Turoff (2002) referred to this IS as a meta-IS as it encompasses all the other ones discussed. It is the only IS which includes self-reflection and the opportunity for learning about oneself in keeping with Senge's emphasis that self-mastery is an integral aspect of systems thinking (Senge, 1990).

Integrated and Enlightening Management Systems

The concept of an integrated management system demands that the system has a purpose (Deming, 1994). Further, it demands that the functions within the system are integrated systemically and the system unites its workers with their individual purposes to accomplish the organization's purpose (Blazey, 2009; Deming, 1986; Lee, Shiba & Wood, 1999; Maslow, 1998). The Baldrige process forms an integrated management system with the aim of helping other organizations continuously improve their integrated management systems. Lee, Shiba, and Wood (1999) defined a system as "a collection of elements that is

configured, via structure and processes, to accomplish explicit or implicit purpose(s)" (p. 3).

Lee, Shiba, and Wood (1999) named two important principles for the success of a system. The first is whether the elements of a system interact well, and the second is that measuring success depends on the measures chosen. It is the responsibility of leadership to design and manage the interactions of the system (Lee, Shiba & Wood, 1999). The Baldrige Criteria, exemplifying an integrated management system, emphasize these principles as well (Baldrige National Quality Program, 2009a).

Lee, Shiba, and Wood (1999) explained that integrated management proceeds by measurement and adaptation in a scientific fashion, which entails observation, hypothesis, and conclusion. They found that each successful organization had its unique way of applying the scientific method. Collecting and analyzing data scientifically rather than intuitively can help organizations monitor their processes so that they can quickly recognize and rectify problems as well as eliminate anything which does not add value (Blazey, 2009). Monitoring data is the focus of Baldrige Category 4.

When monitoring mechanisms are in place, decisions can be made by people closest to the processes without the need to rely exclusively on upper management for an intuitive decision (Blazey, 2009). Monitoring processes and quickly rectifying problems lead to greater efficiency and less waste (Blazey, 2009). The Baldrige Criteria recognize the uniqueness of organizations and require organizations to design and implement their own processes (Lee, Shiba

& Wood, 1999). Creativity to produce unique designs abounds in integrated management systems (Lee, Shiba & Wood, 1999; Maslow, 1998). Such systems provide the structure within which creativity can flourish.

Lee, Shiba, and Wood (1999) found five practices among leaders of integrated management systems: continuous organizational improvement, adaptation of external information, encouragement of employee contribution to the knowledge base, infrastructure in alignment with the organization's vision, and inter-organizational learning.

Practice 1. Continuous Organizational Improvement

With respect to this first practice, a common language throughout the organization is required (Lee, Shiba & Wood, 1999). Standardized measurements yield meaningful, actionable findings to enable the organization to improve (Lee, Shiba & Wood, 1999). Measurement is included in Baldrige Category 4. Lee, Shiba & Wood (1999) described three steps in continuous improvement. The first step is process discovery, which answers the question, "What is happening?" Some processes happen without being specifically designed. The second step is quantifying the desired outcome. The third step is to decide whether the results are predictable and yield good performance.

Deming (1994) introduced a similar approach to improving processes. Deming advised planning an improvement, implementing the improvement, studying the outcome of the improvement, and adopting, changing, or

abandoning the improvement. This cycle is called the plan, do, study, act or PDSA cycle.

Newer renderings of PDSA have appeared. ACT and the 4P's are two such renderings. ACT, which stands for analyze, conclude, test, occurs in the redesign phase when the organization seeks to better manage processes and prevent errors (Duffy, 2004). In the *analyze* phase, the root causes of problems are studied (Duffy, 2004). In the *conclude* phase, ways to solve problems are proposed (Duffy, 2004). During the *test* phase, the conclusions are tested to determine whether the right changes have been made and whether those changes need refining (Duffy, 2004).

The 4P's stand for prepare, perform, perfect, and progress (Gupta, 2006). In the *prepare* phase, good inputs are key (Gupta, 2006). In the *perform* phase, the process is well-defined, checked for mistakes and for consistency and effectiveness (Gupta, 2006). In the *perfect* phase, there is analysis as to whether the process was performed as intended (Gupta, 2006). In particular, the output for the process is checked to make sure it meets performance expectations; if those expectations are not met, further analysis is performed (Gupta, 2006). In the *progress* phase, the reduced variation from the targeted output yields improvement (Gupta, 2006).

Gupta's 4P's lead to better process management and less inspection (Gupta, 2006). Errors are caught in the planning stages with the result being excellence because the focus is on the target (Gupta, 2006). Gupta's and

Duffy's models both prevent problems because the problems are caught in the design stage (Duffy, 2004; Gupta, 2006).

Practice 2. Gathering and Incorporating Data from Outside the Organization

Lee, Shiba, and Wood's (1999) second key practice involves the gathering of data from outside the organization and then making it function smoothly as part of the organization. This practice includes listening to customers, and it also includes benchmarking with competitors (Lee, Shiba & Wood, 1999). A leading organization attends to the present with a view to the future (Blazey, 2009; Deming, 1994; Lee, Shiba & Wood, 1999). Engaging customers to learn their needs and to later learn whether their needs have been met satisfactorily are both key practices in determining customer satisfaction and in the success of the organization (Blazey, 2009). Customer focus is the topic of Baldrige Category 3.

Practice 3. Using Workforce Knowledge

Lee, Shiba, and Wood's (1999) third practice centers on the internal knowledge supplied by the workforce who possess ideas and skills relevant to the processes to which they attend every day. This topic is Category 5 in the Baldrige Criteria. In conjunction with the second practice, these two could be simplified to the one practice of seeking and using data from all sources (Lee, Shiba & Wood, 1999). This third practice honors the intelligence, skills, and expertise of those most closely involved in the processes of the organization. This practice is an example of the social model of an organization, in which the

organization is considered a unified grouping of individuals who come together to manifest their own as well as the organization's purpose (Lee, Shiba & Wood, 1999). The organization then becomes a learning organization and uses the collective knowledge of the employees to create a positive future (Lee, Shiba & Wood, 1999). An organization will not be fully successful unless it engages the people that comprise it (Blazey, 2009). Happy, motivated workers are able to contribute more to their work (Blazey, 2009).

In the social model, which is the model used in integrated management systems, leaders provide guidance for processes without trying to manage people (Lee, Shiba & Wood, 1999). Leaders try to align individual and organizational purposes (Lee, Shiba & Wood, 1999). This key practice of engaging the workforce with its expertise and ideas leads to the next key practice related to organizational vision.

Practice 4. Infrastructure Supporting the Organization's Vision

According to Lee, Shiba, and Wood (1999), an infrastructure which upholds the organization's vision is essential to an integrated management system. Organizations have their own cultures, which are simply behavioral defaults (Lee, Shiba & Wood, 1999). One way to change a culture is to put in place new structures and processes that create a different set of behaviors and attitudes (Lee, Shiba & Wood, 1999). These new structures and processes may be part of a strategic plan.

The strategic plan (Baldrige Category 2) outlines specific goals with a focus on the desired results (Blazey, 2009). In order to achieve those goals, processes must be put in place (Baldrige Category 6) and monitored (Baldrige Category 4) (Blazey, 2009).

Efficient processes are integral to successful organizations and require preventing problems so that the need to repair problems, which is inefficient, is minimized (Blazey, 2009). There are no neutral processes: they either add or subtract value (Blazey, 2009). The most important processes are the work processes (Blazey, 2009). Based on the thoughts of Lee, Shiba, and Wood (1999), a change in workforce processes would produce a change in behavior and attitude. As work processes become efficient, the organization takes on a culture of efficiency.

Leaders envision the kind of cultures they desire as well as the results they desire. Effective leaders communicate their visions and then change the infrastructure to support it (Lee, Shiba & Wood, 1999). Leaders must be able to assess the infrastructure as well as external relationships such as those with customers and suppliers (Blazey, 2009). By communicating their visions, leaders empower the other employees. Empowered employees then contribute their visions to create a shared vision for the organization in which they enjoy participating (Lee, Shiba & Wood, 1999). It is the responsibility of leadership to create a unique vision for an organization. Leadership is the topic of Baldrige Category 1.

When leadership has created a vision (Baldrige Category 1), designed strategic plans to attain the vision (Baldrige Category 2), kept a focus on satisfying customers (Baldrige Category 3), created goal-oriented processes (Baldrige Category 6) and measures for monitoring those processes (Baldrige Category 4), and engaged the workforce (Baldrige Category 5) in actualizing the vision, then the organization will produce the desired results (Baldrige Category 7). The results must be valuable to stakeholders (Blazey, 2009). Examples of value include profit, usability, or durability (Blazey, 2009). As indicated above, the Baldrige process forms an integrated management system.

Practice 5. Creating a Learning and Social Networking Organization

Lee, Shiba, and Wood's (1999) fifth key practice is the creation of a learning organization and, by networking with other organizations, a learning system. Leaders look to their peers in other organizations for inspiration (Lee, Shiba & Wood, 1999). Shared knowledge increases the rate of learning by eliminating the learning curve (Lee, Shiba & Wood, 1999). This fifth key practice of an integrated management system moves beyond the organization into society where society as a whole is influenced by the visions and teamwork of organizations working together to improve society (Lee, Shiba & Wood, 1999).

Deming's Fourteen Points

Similarly to Lee, Shiba & Wood (1999), Deming (1986) proposed fourteen points for the transformation of the workplace. When the workplace is transformed, society is transformed (Lee, Shiba & Wood, 1999). Deming's

(1986) first point revolves around a dedication to always improving products and services. Companies that are successful pay attention to current and future problems (Deming, 1986). Innovation, research, education, and design improvement, and customer focus are all important for the continued success of a company (Deming, 1986).

Deming's (1986) second point urges Americans to adopt the new philosophy which Japan introduced. This philosophy is that quality is the key (Deming, 1986). Americans can no longer afford to accept errors, faulty materials, and workers who don't know what their jobs are (Deming, 1986). Deming's (1986) third point denounces mass inspection and promotes quality through improved processes. His fourth point includes quality and service as well as price as important variables in business bids. When a company grants business to the lowest bidder, that company may get the lowest quality and service as well, but not always (Deming, 1986). It is worth investigating what a company offers in terms of quality when considering bids (Deming, 1986).

Deming's (1986) fifth point is a reiteration of his philosophy of always improving the system of production and service. As mentioned in the first point, the quality of the design is essential (Deming, 1986). Deming's (1986) sixth point focuses on the importance of training leaders about the organization. The seventh point is that managers should lead rather than supervise (Deming, 1986). As leaders, they will empower employees to take pride in their work. Managers who lead know the work they are in charge of leading and they eliminate obstacles which impede workers from doing their jobs (Deming, 1986).

Deming's (1986) eighth point emphasizes giving workers a sense of security by dispelling fear. Fear can take many forms including fear of expression as well as fear of being fired (Deming, 1986). Deming's (1986) ninth point is to encourage dialogues between different areas within an organization. When employees in diverse departments interact constructively, the organization becomes more unified and the overall purpose comes into alignment through integration among the various departments (Deming, 1986). This notion of linkage among departments is key in the Baldrige system (Baldrige National Quality Program, 2009a).

Deming's (1986) tenth point reveals the impact of slogans for the workforce as generators of frustration. Another approach is to listen to the workers to understand what they need to produce a quality product (Deming, 1986). Whereas slogans are disempowering, inviting the workforce to participate is empowering. Deming's (1986) eleventh point has two components: one for the workforce and one for management.

Numerical quotas for the workforce and numerical goals for management without an improvement plan create undue pressure and dissatisfaction for employees (Deming, 1986). Improved processes will naturally produce increased performance results (Deming, 1986).

Deming's (1986) twelfth point addresses pride of workmanship. Annual performance rating robs people of this pride (Deming, 1986). When people know they are important to the organization, they are absent less often (Deming, 1986). Deming's (1986) thirteenth point addresses the importance of personal

learning. People love to contribute just as they love to take pride in their work (Deming, 1986).

Deming's (1986) fourteenth and final point is "Take action to accomplish the transformation" (p. 86). The PDSA cycle describes an approach to taking action for transformation. The action is based on planning, making a change to test the plan, studying the effects of the change, and taking an action, which might require modifying the change, abandoning the change, or adopting the change (Deming, 1986).

Just as Deming (1986) enumerated fourteen points for management, Maslow (1998) offered thirty-six assumptions, which he believed formed the foundation of eupsychian management. Eupsychian management is enlightening management.

Maslow's Assumptions

Throughout his assumptions, Maslow viewed people who were hired in an enlightening management system as evolved enough, or self-actualized enough, to fit into the system. Maslow's (1998) first assumption is "Assume everyone is to be trusted" (p. 20). Maslow (1998) was referring to co-workers who are expected to be fairly evolved. He pointed out that not everyone in the world will fall under that assumption (Maslow, 1998). Maslow's (1998) second point assumes that workers are informed of facts pertaining to their work. Maslow (1998) argued that not only is knowledge good for people, it even has a curative effect. Maslow's (1998) third assumption is that people want to achieve without

wasting time. He acknowledged that not everyone has an urge to achieve, but healthy people who are not ridden by fear or anxiety do have this desire (Maslow, 1998). In particular, Maslow (1998) assumed that people in one's workplace have achieved a certain level of personal evolution or self-actualization.

Maslow's fourth assumption pertains to having no dominance-subordination hierarchy. Such a hierarchy destroys teamwork and the desire of employees to participate in setting goals (Maslow, 1998). Maslow's (1998) fifth assumption is for everyone in the organization to hold the same objectives. Maslow (1998) called this hierarchy-integration and recommended that it replace polarization.

Maslow's (1998) sixth assumption is the expectation of good will among workers. Jealousy and rivalry have no place in enlightening management (Maslow, 1998). Maslow (1998) compared this to sibling rivalry which the child outgrows upon maturing. Maslow (1998) assumed a certain level of maturity among workers in an enlightening management organization. A subset of Maslow's (1998) sixth assumption is that of synergy, which is a balance between selfishness and altruism. Maslow's (1998) seventh assumption is that workers are fairly healthy, by which he meant that they do not suffer from psychoses or addictions. The sixth and seventh assumptions maintain that workers are both emotionally and psychologically healthy (Maslow, 1998).

Maslow's (1998) eighth assumption is similar to his seventh assumption (Maslow, 1998). Whereas the seventh assumption revolved around the

emotional and psychological health of individuals, the eighth assumption pertains to the health of the organization. While the overall health of an organization is related to the health of those it comprises, it is nonetheless separate and is thus a separate assumption (Maslow, 1998). Each organization must establish for itself criteria for good health (Maslow, 1998).

Maslow's (1998) ninth assumption is to admire others in an objective fashion. In other words, individuals must be self-loving enough to appreciate others (Maslow, 1998). This is the aim of enlightening management (Maslow, 1998). This assumption parallels some of Deming's (1986) points in which managers lead rather than supervise and dispel fear thus showing appreciation for workers and giving workers a sense of satisfaction and security in their work.

Maslow's (1998) tenth assumption is that individuals have matured beyond the safety-need level. In some areas of the world people may still function at the safety-need level for whom enlightening management will not work (Maslow, 1998). Authoritarian management uses fear to achieve its aims; fear precludes enlightening management (Deming, 1986; Maslow, 1998).

Maslow's (1998) eleventh assumption is that there is a trend toward self-actualization or growth. People will naturally gravitate to people who are similar to themselves and they will want to try new ideas in an effort to grow (Maslow, 1998). Maslow's (1998) twelfth assumption is that of pleasure from teamwork and a sense of belonging. Whereas self-actualization implies a certain independence from others along one's path of growth, Maslow (1998) balanced

this idea with the notion of people being able to derive pleasure from being in groups with which they can identify; he called these groups love communities.

Maslow's (1998) thirteenth assumption is that hostility is simply a reaction rather than a character trait. Freedom to express oneself honestly may sometimes take the form of hostility, but the reward is openness and a better situation rather than suppressed anger (Maslow, 1998). Maslow's (1998) fourteenth assumption is that people grow from being challenged by reactions such as hostility as long as it is not constant.

Maslow's (1998) fifteenth assumption is that people can improve. This assumption is similar to his assumption that people tend to self-actualize. Maslow's (1998) sixteenth assumption is that people need to feel valued and that esteem and self-esteem are universal needs. People do not want to feel unimportant and interchangeable (Maslow, 1998).

Maslow's (1998) seventeenth assumption is that people would rather respect and even love, rather than hate, their managers. However, if both feelings cannot be had, it is preferable to respect rather than to love the managers (Maslow, 1998). Maslow's (1998) eighteenth assumption is that people would rather fear than hate managers. The idea is that strong leaders are sometimes feared, and not loved, but, at the same time, are often trusted and respected knowing that workers will be treated fairly (Maslow, 1998).

Maslow's (1998) nineteenth assumption is that people prefer to be prime movers rather than passive helpers. Maslow (1998) is referring to people who have a modicum of maturity. Maslow's (1998) twentieth assumption is that

people like to improve things. This notion applies to household chores as well as to the workplace (Maslow, 1998). In other words, relatively psychologically healthy people like to have some responsibility (Maslow, 1998).

Maslow's (1998) twenty-first assumption is that adults, just like children, take delight in doing things then become bored and look for the next level of delight. Growth occurs in delightfully taking on new challenges (Maslow, 1998). Maslow's (1998) twenty-second assumption is that people want to be whole and use all their capacities. An example is that of a laborer who wants to be viewed as more than a set of muscles (Maslow, 1998).

Maslow's (1998) twenty-third assumption is that people would rather work than sit still. For self-actualizing people work is enjoyable (Maslow, 1998). These people identify with it as part of themselves (Maslow, 1998). Maslow's (1998) twenty-fourth assumption is that people will choose meaningful work over meaningless work. When people participate in setting goals, work can become more meaningful (Maslow, 1998).

Maslow's (1998) twenty-fifth assumption is that people cherish their uniqueness as individuals. The alternative is feeling interchangeable (Maslow, 1998). Maslow's twenty-sixth assumption is that people have enough courage to pursue enlightening processes. People may have some anxiety about new process they need to adopt; however, they are willing to make the necessary changes (Maslow, 1998). Using a process to determine whether a change will work such as Deming's PDSA cycle would fortify workers in making changes deemed necessary.

Maslow's (1998) twenty-seventh assumption is that people do not have psychopathies. In other words, they need to be able to feel a healthy range of emotions, and they need to have consciences (Maslow, 1998). Maslow's (1998) twenty-eighth assumption is that psychologically healthy people have the wisdom to make choices based on what they are best at doing and what they like doing. However, habit and continual frustration can interfere with the ability to choose wisely for oneself (Maslow, 1998).

Maslow's (1998) twenty-ninth assumption is that people prefer just and fair appreciation particularly when the praise is made publicly. While people do love to be praised for their work, if they are praised for something they have not done, the praise produces guilt rather than a feeling of recognition and appreciation for a job well done (Maslow, 1998). Maslow's (1998) thirtieth assumption is that for all the positive trends presented thus far there are also negative trends. In other words, where there is a trend toward self-actualization there also exists a trend toward regression (Maslow, 1998). Each new moment may bring a change in the balance of polarities within each individual (Maslow, 1998).

Maslow's (1998) thirty-first assumption is that usually people prefer to be independent and responsible. Most of the time mature individuals shun dependence (Maslow, 1998). Expectations for responsibility must be set at the proper level for each individual: too much responsibility can be overwhelming while too little leads to passivity (Maslow, 1998).

Maslow's thirty-second assumption is that loving produces more pleasure than hating. Friendship, teamwork, and belonging to a well-functioning organization produce pleasure (Maslow, 1998). Psychologically healthy individuals choose love over hate (Maslow, 1998).

Maslow's (1998) thirty-third assumption is that fairly mature people choose creativity over destruction. On the other hand, immature, impulsive people who do not have good control may choose destruction (Maslow, 1998). Maslow's (1998) thirty-fourth assumption is that people prefer to be interested. Few people enjoy being bored (Maslow, 1998). This assumption is similar to Maslow's (1998) twenty-first assumption that people look for the next level of delight.

Maslow's (1998) thirty-fifth assumption is that at the highest levels of enlightening management there is a tendency towards cosmic consciousness and a fusion with the world. People see themselves in others and move towards mysticism (Maslow, 1998). The polarity to this would be increasing alienation with the world (Maslow, 1998). Maslow's (1998) thirty-sixth assumption is that at this highest level of enlightening management there is a need to figure out the assumption of the metamotives of truth and beauty as well as a need to figure out the polar assumption of the metapathologies.

Summary of Integrated and Enlightening Management Systems

By honoring workers' talents and skills and allowing workers to contribute the knowledge of the work they do in participating in decisions about changes to

their processes, the organization grows in a positive trend. Leaders who listen to input from customers and suppliers as well as looking at what competitors are doing, leaders who embrace change after careful study in order to improve the organization, leaders who create an infrastructure with linkages that interact well, and leaders who have a vision that they articulate and in which they engage their employees are enlightening and achieve the results they desire. These are the leaders of integrated management systems.

Baldrige Principles

The Criteria, which serve as the guidelines for applicants as well as examiners who evaluate applications, are based on core values and concepts. The purpose of the Baldrige process is to give organizations concrete guidance in improving their organizational processes resulting in improved performance results (Baldrige National Quality Program, 2009b). An additional purpose is to encourage organizations to share their best practices and thus create an environment of excellence in American organizations (Baldrige National Quality Program, 2009b). Rooted in systems thinking, the Criteria have a goal of helping organizations achieve their goals by encouraging integration of processes with a focus on the customers, personal and organizational learning, and increasing organizational effectiveness and capabilities (Baldrige National Quality Program, 2009b).

Core Values and Concepts

The foundation of the Criteria are the following core values and concepts: visionary leadership, customer-driven excellence, organizational and personal learning, valuing workforce members and partners, agility, focus on the future, managing for innovation, management by fact, societal responsibility, focus on results and creating value, and a systems perspective (Baldrige National Quality Program, 2009b). Successful companies foster these core values and concepts (Baldrige National Quality Program, 2009b). The Criteria bring these core values and concepts to the forefront by structuring the application around them so that organizations must show how they implement these core values and concepts. In this way the Baldrige program helps other integrated management systems continually improve their processes. The Criteria explain the meaning and significance of each of these core values and concepts which form the core of the application. Each of these will now be summarized.

Visionary Leadership

It is imperative for leaders to have a vision and a strategy for implementing the vision in accordance with organizational values and customer focus (Baldrige National Quality Program, 2009b). Leaders set the direction for the organization and inspire innovation and excellence among employees while serving as role models (Baldrige National Quality Program, 2009b). Strong leadership is required because of a natural tendency to maintain the status quo

thus impeding the change in which adherence to these core values entails (Blazey, 2009).

Customer-driven Excellence

Without customers the organization would not exist (Baldrige National Quality Program, 2009b). Hence the Baldrige perspective is that the customers drive the organization (Baldrige National Quality Program, 2009b). An excellent organization listens to the needs of its customers and goes beyond satisfying those needs creating loyalty and trust (Baldrige National Quality Program, 2009b). Listening to and quickly rectifying complaints is imperative (Blazey, 2009). Similarly, listening to feedback from dissatisfied customers is imperative for an organization to be a leader (Blazey, 2009). An excellent organization not only meets the present needs of its customers but anticipates future needs thereby insuring its stature in the marketplace (Baldrige National Quality Program, 2009b). An excellent organization has excellent products, services, and communication with its customers (Baldrige National Quality Program, 2009b).

Organizational and Personal Learning

Continuous learning leads to innovation and creativity personally and professionally (Baldrige National Quality Program, 2009b).Continuous learning leads to continuous improvement (Blazey, 2009). Without continuous improvement, organizations stagnate and perish (Blazey, 2009). One result of continuous learning is the creation of new goals as well as new ways to achieve

those goals (Baldrige National Quality Program, 2009b). Additionally, ways to be more efficient and reduce errors in existing processes help the organization increase its performance (Baldrige National Quality Program, 2009b).

Personal learning may contribute to workers' satisfaction, the organization's knowledge assets, and create an environment for innovation (Baldrige National Quality Program, 2009b). As personal learning is shared with the organization, it becomes organizational learning (Blazey, 2009). Sharing of knowledge is critical to an organization (Baldrige National Quality Program, 2009b). This sharing may lead to best practices as ways to improve processes in one area of an organization become refined and integrated throughout the organization (Baldrige National Quality Program, 2009b). Leadership encourages personal learning by recognizing and rewarding it (Blazey, 2009). Promoting personal learning is one way of valuing workforce members and partners, which is the next core value.

Valuing Workforce Members and Partners

A successful organization accentuates and honors individual skills and knowledge as a strength in creating an environment for innovation and performance excellence (Baldrige National Quality Program, 2009b). One aspect of honoring employees is to let those closest to the processes make decisions; however, they may not be skilled at decision making and they will have only data related to that particular process rather than all the data (Blazey, 2009). The organization must remain flexible to the needs of its workforce to create a safe,

trusting environment (Baldrige National Quality Program, 2009b). The successful organization also fosters internal and external partnerships to attain the organization's goal (Baldrige National Quality Program, 2009b). An internal partnership might be one that encourages cross-training among different work units (Baldrige National Quality Program, 2009b).

External partnerships exist between the organization and customers, suppliers, and the community (Baldrige National Quality Program, 2009b). Communication leads to innovation and responsiveness to the needs of those affected by the organization (Baldrige National Quality Program, 2009b). There is mutual benefit from such partnerships (Baldrige National Quality Program, 2009b). Sometimes new markets are created by such partnerships (Baldrige National Quality Program, 2009b). Respect is a key element in mutually beneficial partnerships (Baldrige National Quality Program, 2009b).

Agility

The rapidly changing work environment requires successful organizations to also change rapidly and to be flexible (Baldrige National Quality Program, 2009b). Faster response to the partners' needs, efficiency to eliminate unnecessary processes, and quality designs that are environmentally responsible can cut costs and strengthen customers' loyalty (Blazey, 2009). Cross-training of the workforce helps organizations shorten the cycle time for new or improved products (Baldrige National Quality Program, 2009b). Cycle time has become increasingly important including the time from the design stage

to the finished product (Baldrige National Quality Program, 2009b). Nonprofit and governmental organizations are expected to quickly respond to social issues that arise (Baldrige National Quality Program, 2009b).Creating new designs to meet changing needs of customers leads to the next core concept, which is a focus on the future (Baldrige National Quality Program, 2009b).

Focus on the Future

Both short and long term goals are essential for successful organizations (Baldrige National Quality Program, 2009b). Goals must be measureable to keep the organization on track (Blazey, 2009). Long term commitments to key stakeholders are also essential for sustainable partnerships with strong futures (Baldrige National Quality Program, 2009b). Strategic planning includes predictions of the future needs of customers as well as predictions about the changing global marketplace with a focus on developing future leaders for the organization (Baldrige National Quality Program, 2009b). With such leaders in place the successful organization can manage for innovation, the next core concept (Baldrige National Quality Program, 2009b).

Managing for Innovation

Managing for innovation has at its core a focus on creating value for the customers. Managing for innovation will keep a successful organization on the leading edge in all dimensions – performance, research, and work processes (Baldrige National Quality Program, 2009b). The organizational and personal learning which builds the knowledge base of the workforce contributes to

innovation (Baldrige National Quality Program, 2009b). Every employee should contribute (Blazey, 2009). Successful organizations use and share this knowledge to create innovation (Baldrige National Quality Program, 2009b). Successful organizations have processes in place to allow for the creation and systematic implementation of innovation (Baldrige National Quality Program, 2009b).

Management by Fact

Organizations implement measures to analyze their performance (Baldrige National Quality Program, 2009b). These measures tie the processes to the results (Baldrige National Quality Program, 2009b). Numerous measures give organizations feedback regarding key processes in the process category of an application (Baldrige National Quality Program, 2009b). Segmenting the data by department, markets, and products helps organizations to further measure their performance and make changes that align with the achievement of organizational goals (Baldrige National Quality Program, 2009b). This Baldrige concept stresses fact rather than intuition. While some decisions are made based on intuition, it is usually the leader's intuition and does not empower employees (Blazey, 2009). Management by fact empowers employees by allowing them to see and contribute to the facts.

Societal Responsibility

Organizational leaders should emphasize societal well-being and benefit to society (Baldrige National Quality Program, 2009b). They must try to predict

any negative effects as such effects could result in a loss of trust (Blazey, 2009). Leaders act as ethical role models in the protection of the public and the environment (Baldrige National Quality Program, 2009b). Successful organizations serve as role models for the conservation of resources and the reduction of waste (Baldrige National Quality Program, 2009b). The design phase of a new product is critical in conservation and waste reduction (Baldrige National Quality Program, 2009b). Successful organizations which serve as role models go beyond governmental compliance in their ethical position towards the public and environment (Baldrige National Quality Program, 2009b). Successful organizations may even serve as educators for the community in teaching societal responsibility (Baldrige National Quality Program, 2009b).

Focus on Results and Creating Value

An organization's measurements must tie to the results (Baldrige National Quality Program, 2009b). If an organization creates value for its customers, the company will have positive results and will grow thereby contributing to the economy and society (Baldrige National Quality Program, 2009b). Organizational goals must include stakeholder requirements so that there is a clear aim in achieving results (Baldrige National Quality Program, 2009b). As different stakeholders have different requirements, the organization must communicate and balance its strategies to add value to its stakeholders, improve organizational performance, and be a benefit to society (Baldrige National Quality Program, 2009b). The focus on results helps the organization

measure performance and refine priorities (Blazey, 2009). The focus on results also helps the organization keep its attention on customers (Blazey, 2009).

Systems Perspective

The theoretical foundation for the Criteria is systems thinking (Baldrige National Quality Program, 2009b). An organization must look at the various parts and how they fit together to form a whole (Blazey, 2009). The Criteria provide a means for looking at the organization as a whole with interconnected parts, which must align to achieve performance excellence (Baldrige National Quality Program, 2009b). Strategic plans, processes, measures, and actions must align to insure quality results (Baldrige National Quality Program, 2009b). A systems perspective considers the customers as well as the organization (Baldrige National Quality Program, 2009b). Organizational leaders listen to and respond to the needs of their customers when making strategic plans (Baldrige National Quality Program, 2009b). Leaders also look at the results to make decisions, which will improve performance and service to stakeholders (Baldrige National Quality Program, 2009b).

Key Characteristics of the Criteria

The Criteria have four key characteristics: The Criteria focus on results; the Criteria are nonprescriptive and adaptable; the Criteria support a systems perspective to maintaining organization-wide alignment; and the Criteria support goal-based diagnosis (Baldrige National Quality Program, 2009b). The focus on results is divided into product outcomes, customer-focused outcomes, financial

and market outcomes, workforce-focused outcomes, process effectiveness outcomes, and leadership outcomes (Baldrige National Quality Program, 2009b). With respect to the second characteristic, it is the organization which must determine how to structure itself and how to create processes in alignment with its goals (Baldrige National Quality Program, 2009b). The Criteria focus on the results and the alignment of processes to attain the results (Baldrige National Quality Program, 2009b).

With respect to the third characteristic, a systems perspective is the foundation for the Criteria (Baldrige National Quality Program, 2009b). A systems perspective is a holistic perspective which recognizes interrelationships both internally and externally (Baldrige National Quality Program, 2009b). The feedback between results and processes represents a systems perspective (Baldrige National Quality Program, 2009b). There are four stages in the improvement cycle: approach, deployment, learning, and integration (Baldrige National Quality Program, 2009b). With respect to the fourth characteristic, the Criteria set out the performance requirements, and the scoring guidelines give a numeric assessment based on a well-defined rubric (Appendix A). (Baldrige National Quality Program, 2009b). An assessment provides actionable feedback for organizations to improve their performance (Baldrige National Quality Program, 2009b). These Baldrige principles are inculcated into examiners during examiner training, which is the topic of the next section. Background information and literature related to the Baldrige Criteria organizational profile, categories, and items are addressed in Chapter I.

Examiner Selection and Training

Examiners come from a variety of sectors including health, education, business, or nonprofit organizations. Examiners must either be United States citizens or permanent residents. Factors used in selecting examiners include expertise in business, education, health care, or nonprofit organizations; knowledge of performance improvement strategies; experience; skills in leadership, communication, teamwork and analysis; and education and training (Baldrige National Quality Program, 2009b). Examiners are required to abide by a Code of Ethical Conduct.

National Baldrige training requires a three-day preparation course with one additional day for new examiners. The training is so important that failure to attend the training excludes a candidate from participating as an examiner. Prior to attending the training examiners must complete a case study, which requires thirty to forty hours of preparation. Examiners will then spend an additional minimum of 110 hours in the evaluation process.

As explained in Chapter I, many states model their programs after the national program. Variation occurs as the states create their own programs for the particular state needs and resources. As the present research involved panelists representing fourteen state Baldrige programs, each of these programs will be discussed in the following section.

Histories and Philosophies of the State Baldrige Organizations

Fourteen state Baldrige organizations contributed experts to the Delphi Panel for this dissertation project. The websites for these organizations provide information regarding the structure of each of the organizations. As this study revolves around the initial training of examiners in the best practices for teaching core competencies to examiners, a brief history and philosophy of each of the state organizations involved will focus on the levels of applications available and the extent of training of the examiners in order to conduct the initial individual evaluation. The contributing states will be addressed in alphabetical order: Alaska, California, Colorado, Illinois, Louisiana, Michigan, Minnesota, Missouri, New Mexico, Ohio, Oklahoma, Tennessee, Texas, and Wisconsin.

Alaska Performance Excellence

Alaska Performance Excellence, or APEX, started its program in 2008 in order to recognize excellence in Alaskan organizations. APEX structures its program from the Baldrige National Quality Program (BNQP). APEX's vision statement is, "Alaska's organizations are world class" (Fowler, 2008, ¶ 1). APEX's mission statement is, "To educate and assist Alaska's organizations in the pursuit of performance excellence, through assessment and organizational learning, in order to achieve results which contribute to the social and economic vitality of all" (Fowler, 2008, ¶ 2).

APEX offers three levels of applications: a self-assessment level, an achievement level, and an excellence award level. The achievement level

requires the applicant to submit a five page organizational profile and a twenty-five page application while the excellence award level requires a five page organizational profile and a fifty page application. In its first year of evaluating applications, APEX had thirty-two examiners to evaluate level two and three applications. The initial training required for examiners to individually evaluate a level two application consists of a one day training session in November. Thereafter, examiners spend between thirty to fifty hours in their individual evaluations of the applications.

The California Council for Excellence

The California Council for Excellence (CCE), which began in 1994, sponsors the California Award for Performance Excellence (CAPE) and the California Team Excellence Awards (CTEA). Several California organizations have won the Baldrige National Award. “The Mission of the California Council for Excellence is to help California's private and public sector organizations achieve world-class results through the principles and criteria of the Malcolm Baldrige Award for Performance Excellence” (CCE, 2008, ¶ 1). As the CCE is one of the few organizations that differentiates between team-based process improvement and overall organizational improvement, the more relevant award program for this study because of its similarity to other programs is the CAPE program.

CAPE’s vision is, “We are recognized as a valued resource for strengthening the competitiveness of California organizations” (CCE, 2008; CAPE, 2008, ¶ 3). Its mission statement is, “To help California organizations in

all sectors continuously improve through a Baldrige based performance excellence program" (CCE, 2008; CAPE, 2008, ¶ 2). CAPE has three award levels. The first level is a self-assessment to help organizations begin their journey in performance improvement. The second level furthers the performance improvement efforts of the applicants and entails a twenty-five page application in addition to a five page organizational profile. The third level of the award requires applicants to submit a fifty page application in addition to a five page organizational profile. This award uses the most current Criteria of the Baldrige National Quality Program. Applicants earning at least 250 points out of 1000 possible points receive site visits.

Colorado Performance Excellence

Colorado Performance Excellence (CPEx) incorporated in 2000. The vision of CPEx is to create a culture of excellence throughout Colorado. Its mission is to "serve the people of Colorado by cultivating performance excellence that generates outstanding results" (CPEx, 2008, ¶ 2). The mission is accomplished through training and education, assessment and feedback, recognition and awards, networking, and the sharing of best practices.

CPEx bases its structure on the Baldrige National Quality Program. CPEx offers four levels of awards: the first level is a self assessment award based on an organizational profile which the applicant completes. The second level is designed for organizations which are just beginning their quality journey. The third level requires organizations to assess their approaches, deployment,

learning, and integration of processes. The Criteria for the fourth level are the same as for the Baldrige National Quality Program. In this level organizations discuss their processes and their results.

New examiners attend a three-day training session in addition to the two-day training that returning examiners attend. The training involves a case study that examiners have spent roughly thirty hours evaluating prior to training. The actual application requires twenty to forty hours to evaluate and score. Additionally, serving as an examiner contributes to one's professional development as well as serving the people of Colorado by helping to cultivate performance excellence thereby generating outstanding results.

The Lincoln Foundation for Performance Excellence (Illinois)

The Lincoln Foundation for Performance Excellence has been helping Illinois organizations excel since its inception in 1994. Its mission is "To be the Leader in Helping Illinois Organizations to Achieve Performance Excellence Through the Deployment of the Baldrige Criteria" (Lincoln Foundation for Performance Excellence, 2008, ¶ 1).

In its effort to analytically encourage organizations to achieve their full potentials, the Lincoln Foundation for Performance Excellence bestows awards to all organizations which attain a specified level of excellence. Accordingly, organizations can win bronze, silver, or gold level awards. First year examiners attend an extra day of training in addition to the three-day training all examiners attend. The State of Illinois supports the efforts of the Lincoln Foundation for

Performance Excellence. The Lincoln Foundation cites studies by the National institute for Standards and Technology, universities, business organizations, and the U.S. General Accounting Office as verifying the correlation between an investment in quality principles and productivity, profit, and customer satisfaction.

The Louisiana Quality Foundation

The Louisiana Quality Foundation has been helping Louisiana organizations achieve performance excellence both at the state and national level. The foundation supports performance excellence opportunities for Louisiana organizations (Louisiana Quality Foundation, 2008). The Louisiana Quality foundation has two different award programs with three levels of awards in each program. The two programs are the Performance Excellence Award and the Environmental Management Award. Each spring the governor presents these awards to deserving recipients.

The Michigan Quality Council

The Michigan Quality Council (MQC) sees its vision as having Michigan organizations nationally recognized for their excellence. Its mission "is to help organizations improve their performance using the Baldrige Criteria for Performance Excellence" (Markley, 2008, ¶ 1). The Michigan Quality Council achieves its mission by "evaluating organizations and providing feedback on strengths and improvement areas, identifying and promoting best practices, providing professional development, recognizing exemplary performance, and

providing consulting partnership with others" (Markley, 2008, ¶ 1). The MQC has three award levels: the beginning level is the Lighthouse, the Navigator, which is the intermediate level, and the Michigan Quality Leadership Award, which is the highest award. Additionally, in the educational sector the MQC offers the Beacon Classroom and Teacher Recognition. Training for examiners takes two days and uses a case study.

The Minnesota Council for Quality

The Minnesota Council for Quality, founded in 1987, is a non-profit corporation which holds as its purpose to advance "improvement and performance excellence within organizations, individuals, and communities" (Minnesota Council for Quality, 2008, ¶ 1). The Minnesota Council for Quality's purpose is as follows:

> We believe that Minnesota's socio-economic future depends largely on the effective management of organizations throughout the state. Therefore, our goal is to help organizations of all sizes, in all sectors, and in all communities throughout Minnesota improve their operations and their performance. We also believe that communities within the state will be stronger if leaders work together to solve social and economic challenges that cross organizational boundaries; therefore, part of our focus is on providing leaders the network and means to improve the communities in which they live and work. (Minnesota Council for Quality, 2008, ¶ 1)

The Council's vision is as follows: "The Council will be the innovative national leader in facilitating performance excellence" (Minnesota Council for Quality, 2008, ¶ 9). The Minnesota Council for Quality expresses its mission through its infinity sign logo:

> The Council helps leaders identify strengths and improvement opportunities and builds networks that bring information, resources, knowledge, and best practices to organizations desiring to improve.
>
> We do this by, offering services such as our Baldrige-based organizational assessments (and Minnesota Quality Award), the Performance Improvement Network, the Consultant Referral Network, and the improvement Clearinghouse, and by collaborating with other non-profits that focus on improvement.
>
> Our charge is to help leaders identify improvement opportunities and focus resources (with services such as our Baldrige-based assessment process), and then bring them the resources to help them take improvement action (with services such as our Clearinghouse, Consultant Referral Network, benchmarking, and Performance Improvement Network).
>
> One of the symbols that best represents our mission is the "infinity diagram" which implies that improvement is a continuous journey. The left side of the diagram represents assessment, discovery, learning and prioritization; the right side represents the available resources to execute improvement. Though the programs and services that fit within either side

may evolve over time, the ultimate goal remains constant. (Minnesota Council for Quality, 2008, ¶ 3-6)

Evaluators spend three days in training to learn about the four levels of the Minnesota awards and to help organizations improve their performance. The four award levels are as follows: Commitment, which is a self-assessment, Advancement, Achievement, and Excellence.

The Excellence in Missouri Foundation

The Excellence in Missouri Foundation has offered the Missouri Quality Award since 1992. The foundation's vision is "elevating Missouri through excellence" (Excellence in Missouri Foundation, 2008, ¶ 2). The foundation actualizes its vision through its mission of "educating, supporting, and recognizing Missouri organizations and individuals for sustained performance excellence" (Excellence in Missouri Foundation, 2008, ¶ 3).The foundation offers the Missouri Quality Award and the Missouri Team Quality Award. The Board of Examiners consists of quality experts from all sectors in Missouri. The members of this board attend training for one day and are eligible for the Williamson Award for their dedication to the award process.

Quality New Mexico

Quality New Mexico (2008) has been active since 1996 in bestowing awards. Currently there are three award levels: the Pinon Recognition for commitment, the Roadrunner Recognition for progress, and the Zia Award for

Performance Excellence. All examiners attend a two-day training session with new examiners attending one additional day.

The Ohio Partnership for Excellence

The Ohio Partnership for Excellence "is responsible for making quality a statewide priority and disseminating best practices across Ohio" (Ohio Partnership for Excellence, 2008, ¶ 1). There are two components to the award program with several levels within each component. The two components are Start the Journey and the Full Application Program. Examiners attend a two-day training session with new examiners attending an additional half day of training.

The Oklahoma Quality Award Foundation

The Oklahoma Quality Award Foundation, founded in 1993, has as its mission to "Help Oklahoma organizations improve results and be more competitive through performance excellence" (Oklahoma Quality Award Foundation, Inc., 2008, ¶ 1). The foundation promotes awareness of performance excellence and information sharing of successful performance strategies. The foundation offers three award levels: Commitment, Achievement, and Excellence. Training of examiners occurs in phases according to the necessary preparation in the evaluation process. The initial training prior to the individual review phase is a one-day training session. There are two more training sessions with the second training session lasting one day and the third training session lasting three days.

The Tennessee Center for Performance Excellence

The Tennessee Center for Performance Excellence has as its mission "To lead businesses and other organizations in the pursuit of performance excellence, improving results and contributing to the economic vitality of the region" (Tennessee Center for Performance Excellence, 2008, ¶ 1). There are four award levels: the beginner level is Interest Recognition, the intermediate level is the Commitment Award, the advanced level is the Achievement Award, and the highest level is the Excellence Award. All examiners attend a three day training session with new examiners also attending a half day orientation. The training utilizes a Baldrige case study, which examiners must complete as their pre-work assignment, which is then used as a teaching tool during training.

Quality Texas

Quality Texas originated in 1990. Its vision is "To engage all Texas organizations in a journey towards the achievement of world-class performance excellence" (Quality Texas, 2008, ¶ 1). As its mission, "Quality Texas helps organizations achieve performance excellence using the Baldrige Criteria as a framework for improvement" (Quality Texas, 2008, ¶ 2). Quality Texas offers five levels to meet the varying degrees in the organizational journey to performance excellence: For organizations just beginning their journey in performance excellence there is a Self-Assessment. The Engagement level requires a 10-12 page application focused on the basic requirements. The Commitment Level Award requires a 15 page application with no site visit option. The Progress

Level Award requires a 25 page application and a site visit may be purchased. TAPE, the Texas Award for Performance Excellence, is the highest award and requires a 50 page application. Organizations applying for this award are granted a site visit. New examiners participate in a two hour webinar in addition to the three day training attended by all examiners.

The Wisconsin Forward Award

The Wisconsin Forward Award originated in 1997. Its mission is "to promote and recognize the adoption of performance excellence principles and practices by Wisconsin organizations through enhanced continuous learning and quality improvement (Wisconsin Forward Award, 2008, ¶ 2). The Wisconsin Forward Award offers four levels of awards: Commitment level, Proficiency level, Mastery level, and Excellence Award. Examiners participate in National Baldrige webinars in addition to a two day training session. New examiners participate in an additional one day training session. Pre-work includes a case study.

Summary

These state programs all follow Baldrige concepts in helping organizations continuously improve and produce good results which will benefit the organization and the state. All of these state programs offer training sessions for examiners with variation in the amount of training and in the pre-work case study requirements. One of the differences in the programs is in the number of levels of applications offered. Some states offer two levels while one state offers

five levels. The rich variety of experience and expertise of the panelists from these states contributed to the present study. The next chapter discusses the methodology used in the study.

CHAPTER III

RESEARCH METHODOLOGY

The present study used the Delphi Technique to investigate the research questions:

1. What are the core competencies needed for state Baldrige examiners?
2. What are the best practices in examiner training programs provided by state Baldrige organizations?
3. What are the best practices for teaching the core competencies?

The Delphi Technique

The Delphi technique was created by RAND Corporation scientists Helmer and Dalkey in 1953 as a method for obtaining expert opinions and keeping them anonymous (Cornish, 2004; Adler & Ziglio, 1996). The method is used to gain group consensus (Cornish, 2004). The technique is named after the Greek Oracle of Delphi with references to the Oracle from as early as 1400 BC (Hoyle, 2007). Cornish (2004) stated that traditionally the judgments from the individual experts are kept anonymous so that no one influences anyone else. Cornish (2004) referred to the Delphi process as a polling process.

The Delphi technique works by selecting experts to participate in a survey. The survey consists of several rounds through which additional

questions provide further clarification of the collective opinions of the experts (Cornish, 2004). Linstone and Turoff (2002) noted that responses become stable and usually converge within three rounds. The Delphi administrator may need to reframe the questions after each round to refine them in order to gain consensus so that the administrator can combine the responses to create a final group judgment (Cornish, 2004). Hoyle (2007) noted that the Delphi technique is useful in forecasting future programs because of the way information is gathered and the way consensus is reached. Something new emerges out of the process. The technique is thus most appropriate for the present study.

Dalkey (2002) explained characteristics of the technique as follows:

1. The exercise involves a group;
2. The goal of the exercise is information; i.e., the exercise is an inquiry;
3. The information being sought is uncertain in the minds of the group;
4. Some preformulated systematic procedure is followed in obtaining the group output. (p. 231)

Adler & Ziglio (1996) explained,

> The objective of most Delphi applications is the reliable and creative exploration of ideas or the production of suitable information for decision-making. The Delphi Method is based on a structured process for collecting and distilling knowledge from a group of experts by means of a series of questionnaires interspersed with controlled opinion feedback. (p. 3)

Within the structure and anonymity of the survey creativity springs forth. Linstone and Turoff (2002) stated simply that “Delphi may be characterized as a method for structuring a group communication process so that the process is effective in allowing a group of individuals, as a whole, to deal with a complex problem” (p. 3). Further applications of the Delphi concept have demonstrated its usefulness in creating models which depend on subjective inputs (Linstone & Turoff, 2002). As the present study relies on subjective inputs to determine core competencies and best practices in order to create a set of best practices for teaching the core competencies in the training of examiners, the Delphi method is appropriate.

The Delphi technique was originally used by the military to address such sensitive questions as determining the number of Soviet atomic bombs that would be needed to destroy the U.S. munitions industry (Cornish, 2004).

Cornish (2004) further explained that the Delphi technique both improves and clarifies the opinions of the experts on the panel. By using computers, the location of the experts can be anywhere (Cornish, 2004; Adler & Ziglio, 1996). In this particular study, experts participated from fourteen states. The surveys were sent via email. Cornish concluded that the Delphi technique has proven its usefulness over time as a method to gain input for important decisions where judgment plays a role.

With respect to the selection of panelists, Adler and Ziglio (1996) stated that the literature suggests that ten to fifteen panelists are enough to obtain good results. This study started with twenty-two panelists in Round 1 and finished with

eighteen panelists in Round 4. Adler and Ziglio (1996) further explained that the selection of the experts must follow certain criteria:

> The first component of expertise is, of course, knowledge and practical engagement with the issues under investigation. Another criterion is the capacity and willingness of selected experts to contribute to the exploration of a particular problem. Other criteria for selection include assurance from experts that sufficient time will be dedicated to the Delphi exercise. Skill in written communication and in expressing priorities through voting procedures can also represent criteria for selection. (p. 14)

Description of the Selection of the Delphi Panel

Initially a letter was sent to the directors of state Baldrige organizations (Appendix A). The letter asked the directors to select two instructors in the training process who met the following criteria: They have served as instructors for at least three years; they have served as either a feedback writer or team leader for at least one year; they have served as either a state or national level Baldrige examiner for at least two years; and they have been on at least one site visit. State Baldrige organizations from Alaska, California, Colorado, Illinois, Louisiana, Michigan, Minnesota, Missouri, New Mexico, Ohio, Oklahoma, Tennessee, Texas, and Wisconsin provided experts who graciously participated in the survey. Twenty-two panelists participated in Round 1; twenty-one panelists participated in Round 2; nineteen panelists participated in Round 3; and eighteen panelists participated in Round 4.

An introductory letter (Appendix G) was sent to each of the twenty-two people who agreed to participate on the Delphi panel. Fourteen states were represented in the first round of the survey, and thirteen states were represented in the remaining rounds.

Content and Face Validity of the Original Core Competencies and Best Practices

Borg and Gall (1989) define content validity as "the degree to which the sample of test items represents the content that the test is designed to measure" (p. 250). "Face validity is concerned with the degree to which a test *appears* to measure what it purports to measure. . ." (Borg & Gall, 1989, p. 256). The Delphi instrument is developed according to Delphi experts Linstone and Turoff as follows:

> The first phase is characterized by exploration of the subject under discussion, wherein each individual contributes additional information he feels is pertinent to the issue. (2002, p. 5)

This step has actually been accomplished over many years by the constant review, research, and adoption of core competencies directly related to the Baldrige Criteria.

Content Validity of the Original Core Competencies

The original set of core competencies included in the Delphi instrument for this study was derived from the Baldrige Criteria Purposes, Core Values and Concepts, and Key Characteristics of the Criteria. The wording of the original core competencies in the survey reflects the wording in the Baldrige Criteria and

breadth of sections from which the core competencies were derived reflects the scope of the Criteria. Thus, by extension the set of core competencies in the survey meets the requirements of content validity.

The Baldrige Criteria for Performance Excellence have been meticulously reviewed and updated every year from 1988 – 2009 by experts in quality management nationwide who serve as volunteers on the Board of Overseers with input from the volunteers on the Board of Examiners. Further validation comes from the thousands of organizations nationwide which have improved their processes and results using the Baldrige Criteria.

> The Criteria for Performance Excellence have evolved significantly over time to help organizations address a dynamic environment, focus on strategy-driven performance, address concerns about governance and ethics, and, most recently, consider the key decisions driving both short-term success and long-term organizational sustainability. The Criteria have continually progressed toward a comprehensive, integrated systems perspective of overall organizational performance management. The year-to-year changes to the Baldrige Criteria have been evolutionary. However, since the Baldrige Program's inception over 20 years ago, the changes to the Criteria have been revolutionary. They have evolved from having a specific focus on manufacturing quality to a comprehensive strategic focus on overall organizational competitiveness and sustainability. With each update of the Criteria, the Program must balance two important stakeholder considerations. On one hand, there is a need

> for Criteria that are at the leading edge of validated management practice to help users address the increasingly complex challenges they face; on the other hand, there is a desire for the Criteria to remain stable in order to provide users continuity in their performance assessments. In 2008, minimal revisions were made, in light of the major revisions made in 2007. Continuing its efforts to balance stakeholders' needs for both currency and stability, starting in 2009, the Program is moving to a formal two-year revision cycle, making these the 2009–2010 Criteria for Performance Excellence. (Baldrige National Quality Program, 2009b, p. 7)

There is a Board of Examiners and a Board of Overseers at each state level, both of which are modeled after the national program. The Board of Overseers with input from the Board of Examiners is responsible for the integrity of the training of examiners so that the content and pedagogy of the training maintains the fidelity and integrity of the Baldrige program. Each state annually reviews its training in light of the reevaluated core competencies at the national level and makes improvements to training as deemed appropriate.

Face Validity of the Original Core Competencies

The original set of core competencies having come from the Baldrige Criteria was familiar to the Delphi panelists. This high degree of familiarity, which made the survey statements *appear* to measure their importance as

competencies examiners need to master, is probably why these core competencies all reached consensus within two rounds.

Content and Face Validity of the Original Best Practices

The original best practices in the survey reflect the actual practices used in state Baldrige programs as indicated either on their websites or through direct communication with their directors. Each state Board of Overseers is responsible for developing, monitoring, and improving pedagogical practices utilized in training state examiners and for evaluating these practices at least annually based on feedback from quality experts participating in the training. Given that these best practices were developed and utilized by content experts, the items included in the Delphi instrument for this study meet content validity by default.

Because the original set of best practices reflects the actual practices used to train examiners they also *appear* to measure the actual practices used. So this original set of best practices used in the Delphi instrument for this study also meets face validity. For example, the use of a case study is well-known to trainers in state programs. Hence, the inclusion of this practice evinces both content and face validity.

Description of the Rounds of the Survey

Round 1

In Round 1 the panelists received a transmittal letter (Appendix H), an Information Sheet as required by the Institutional Review Board (Appendix I), and instructions along with the survey (Appendix B). The questions for the survey came from the literature. The panelists were asked to rank the core competencies according to essentiality as follows:

4 represents a core competency or best practice which is **essential** in the training of examiners;

3 represents a core competency or best practice which is **important but not essential** in the training of examiners;

2 represents a core competency or best practice which is **helpful but not very important** in the training of examiners;

1 represents a core competency or best practice which is **unimportant and should not be included** in the training of examiners.

In this first round there was only one table with the first twenty-five items denoted as core competencies and the last six items denoted as best practices (Appendix B). These original core competencies were derived from the *Criteria for Performance Excellence* (Baldrige National Quality Program, 2008). Panelists were asked to contribute additional core competencies and best practices for inclusion in subsequent rounds.

Round 2

The second round consisted of four tables (Appendix C). Panelists received instructions attached to the survey. The first table was the original set of core competencies; the second table was the set of core competencies suggested by the panel; the third table was the set of original best practices; and the fourth table was the set of best practices suggested by the panel. When two or more panel members suggested similar core competencies or best practices, their ideas were synthesized into one core competency or best practice. These core competencies and best practices suggested by the panel were ranked for the first time in this second round. The original core competencies and best practices included the group mean, standard deviation, and the individual panelist's rank for each item as well as a column in which each panelist could indicate a new rank if desired. The ranking system was the same for this round as for Round 1.

Round 3

Panelists received detailed instructions accompanying the three tables of this round (Appendix D). Because the original core competencies and best practices achieved consensus at the end of Round 2, only the core competencies and best practices added by the panel were included for re-ranking. (The consensus process will be explained later in this methodology chapter.) Table D-1 of this round consisted of the core competencies added by the panel while Table D-2 consisted of the best practices added by the panel.

Both tables included the group mean and standard deviation and the individual panelist's rank from the previous round for each item.

The third table of this round was a matrix addressing the relationship of best practices to core competencies. All best practices and core competencies having ranks at least equal to 3.0 at the end of Round 2 were included in the matrix. Rather than assigning a rank for each association, panelists were simply asked whether they believed a given best practice was an effective technique for teaching a given core competency.

Round 4

Panelists once again received instructions accompanying this fourth and final round of the survey (Appendix E). Those core competencies and best practices added by the panel which did not reach consensus in Round 3 appeared again in this round in Tables D-1 and D-2 respectively.

Table D-3 gave the panelists a chance to rank the paired items from the matrix in Round 3 in which the panelists indicated which best practices should be paired with which core competencies. Only those associations which had at least ten responses from the panelists were included in Table D-3. The question which served to guide panelists in assigning a rank was "To what extent should this be considered a best practice for teaching this core competency?"

The meaning of the rankings 1 – 4 was slightly different for the association of best practices and core competencies than the meaning of the

ranks for the other tables where only a best practice or core competency was ranked. The numbers 1 – 4 were give the following definitions for Table D-3:

4 indicates the given best practice is **very effective** for training the given core competency;

3 indicates the given best practice is **moderately effective** for training the given core competency;

2 indicates the given best practice is **minimally effective** for training the given core competency;

1 indicates the given best practice is **ineffective** for training the given core competency.

Consensus in a Delphi Survey

Scheibe, Skutsch, and Schofer (2002) described a method for comparing the distribution of responses in two consecutive rounds of the survey to arrive at consensus. Consensus is defined as follows: Agreement of responses with less than 15% change in response (Scheibe, Skutsch & Schofer, 2002). The method is described as follows (Scheibe, Skutsch, and Schofer, 2002): For each item the absolute value of the difference in the number of responses between two consecutive rounds is summed and divided by two. Dividing by two is necessary to obtain the net change per person because each panelist's rank is represented in each round. This number is then divided by the number of panelists and converted to a percentage. If there were fewer panelists in the second round of

comparison, the smaller number was used and the responses of the panelists who dropped out were not counted. For example for one item:

Round 1	0 1s	2 2s	9 3s	10 4s
Round 2	0 1s	2 2s	10 3s	9 4s
	0	0	1	1

1 + 1 = 2; 2/2 = 1; 1/21 = 4.8% < 15% Consensus reached

Procedures

An introductory letter was sent to each of the initial twenty-two participants. The participants were given the choice of receiving the surveys via mail or email. Everyone opted for emailed surveys. Only the researcher knew the names of all the participants. It was estimated that each round of the survey would require approximately 30 minutes to rank the items. Several panelists took the time to write comments which further elucidated their thoughts.

The panelists were generally given two weeks to complete the survey, and it was estimated that there would be two weeks in between rounds of the survey. However, it often took one month for all the panelists to complete the survey. Time was taken off from the survey in August, 2008 and again over the 2008 Christmas holidays. The initial round of the survey was emailed in late June and the final round was emailed in early December, 2008. All results from the final round were received in January, 2009. By the end of the four rounds of the survey the only item which did not achieve consensus was a core competency added by the panel.

Statistical Analysis

The responses were entered into SPSS version 15.0 statistics program. Descriptive statistics yielded the group mean and standard deviation for each item. In each subsequent round each panel member received the group mean, standard deviation and his or her own ranking for each item. Each panelist was given the opportunity to change the rank based on the additional information of the group mean and standard deviation.

Human Subjects in Research

The Institutional Review Board, Texas A&M (protocol number 2008-0241) exempted this research project from a review because the project met the specified criteria for exemption. Panelists received a copy of the Information Sheet (Appendix I) as required by the Institutional Review Board.

After obtaining names of potential panelists from directors of state Baldrige organizations, the researcher sent email invitations to each potential panelist. After acceptance, a letter was mailed to each participant (Appendix G) explaining the purpose of the study and the expected extent of commitment from each panelist. The directors of the various state Baldrige organizations provided some initial data explaining their training programs as requested in the letter to the directors (Appendix A).

Human Subjects Protection

Anonymity of subjects was assured and upheld. Each panelist received only his or her ranking for the items along with the group mean and standard

deviation. Items added by the panel were synthesized when more than one person offered the same suggestion. In any case, no names were associated with the added items, and the researcher did not reveal the names of the other panelists.

CHAPTER IV

ANALYSIS OF DATA

In analyzing the data, it is important to keep in mind the purpose of the research. The first purpose is to determine the core competencies needed by state Baldrige examiners; the second is to identify best practices in examiner training programs provided by state Baldrige organizations; and the third is to identify the best practices for teaching the core competencies. The research questions are as follows: What are the core competencies needed for state Baldrige examiners? What are the best practices in examiner training programs provided by state Baldrige organizations? What are the best practices for teaching the core competencies?

Each of the research questions will be addressed in terms of the data supplied by the Delphi Panel in their responses to four rounds of surveys. For the purpose of this research, the core competencies needed by state Baldrige examiners are those with a Delphi Panel group mean at least equal to 2.5 as core competencies with a Delphi Panel group mean between 2.5 and 3.5 are considered important. The scale used by the panel was a Likert-type four point scale with the following descriptions:

- **4** represents a core competency or best practice which is **essential** in the training of examiners;

- **3** represents a core competency or best practice which is **important but not essential** in the training of examiners;
- **2** represents a core competency or best practice which is **helpful but not very important** in the training of examiners;
- **1** represents a core competency or best practice which is **unimportant and should not be included** in the training of examiners.

Core competencies with group means at least equal to 3.50 are considered essential. Core competencies with group means at least equal to 2.50 and less than 3.50 are considered important. Core competencies with group means at least equal to 1.50 and less than 2.50 are considered helpful. Core competencies with group means less than 1.50 are considered unimportant.

Research Question One

The first research question asks, “What are the core competencies needed by state Baldrige examiners?” Core Competency is defined as a skill needed by examiners to effectively evaluate and score an application. It answers the question ‘what’ and describes an outcome.

The core competencies which appeared in Round 1 were based on core competencies found in the *Criteria for Performance Excellence* (Baldrige National Quality Program, 2009b), the *Criteria for Performance Excellence* (Quality Texas Foundation, 2007), and the Quality Texas *Examiner Reference*

Manual (2007). In addition, the panelists were invited to add core competencies as part of their first round responses. The core competencies which panel members contributed were included for ranking in subsequent rounds of the survey. The numbering of the core competencies in the tables is the same as it appeared in the surveys which the panelists completed. This preserves the original order. However, the core competencies are displayed in the tables according to descending means.

Round 1. The Original Core Competencies

Table 1 and Figure 1 depict the twenty-five original core competencies of Round 1 in descending order by the group means at the end of Round 1. Twenty-two expert panel members contributed their input to Round 1. Each of the original twenty-five core competencies will be discussed in descending order as in the table and graph in light of its ranking by the panelists.

The core competency with the highest group mean of 3.82 and a standard deviation of .50 was “Examiners must learn to relate specific key factors to Criteria items” (item number 2).Key factors are those which are critical to organizations. The Criteria are the framework which embodies the questions organizations answer in their applications. Nineteen panelists ranked this item as 4, two panelists ranked it as 3, and one panelist ranked it as 2. The clustering around the rank of 4 gave this item its high mean and relatively low standard deviation. Relating key factors to the Criteria items was deemed by the panel to be essential for examiners.

TABLE 1. Mean and Standard Deviation of Original Core Competencies, Round 1 Results

Core Competencies	Mean Round 1 Results	Standard Deviation Round 1 Results
2. Examiners must learn to relate specific key factors to Criteria items.	3.82	.50
5. Examiners must learn to write opportunities for improvement (OFI's).	3.77	.43
14. Examiners must have a full understanding of the importance of the organizational profile in setting the context for the way the organization operates.	3.77	.43
4. Examiners must learn to write strengths.	3.73	.46
21. Examiners understand the meaning of "how."	3.68	.48
6. Examiners must learn how to score within a range.	3.64	.49
18. Examiners understand that the Criteria are non-prescriptive and adaptable.	3.64	.58
3. Examiners must learn to evaluate an application in terms of A/D/L/I or Le/T/C/Li/G's.	3.64	.66
24. Examiners understand that the focus in the results items is on the most critical organizational performance results.	3.59	.50
19. Examiners understand that the Criteria support a systems perspective to maintaining organization-wide goal alignment.	3.55	.60
23. Examiners understand the importance of cross-references across categories.	3.50	.60
22. Examiners understand the meaning of "what."	3.45	.60
17. Examiners understand that the Criteria focus on results.	3.45	.74
15. Examiners must have a full understanding of the system operations (categories 1, 2, 3, 5, 6, and 7) and the systems foundation (category 4).	3.41	.59
8. Examiners must learn to verify the score/comment balance.	3.41	.67
16. Examiners must have a full understanding of the criteria structure with its subsets of Items and Areas to Address.	3.32	.57
1. Examiners must learn to write meaningful key factors.	3.32	.72
10. Examiners must have a full understanding of the role that the Criteria play in contributing value to customers and stakeholders and organizational sustainability.	3.27	.88
9. Examiners must learn to write key themes.	3.24	.77
11. Examiners must have a full understanding of the role the Criteria play in the improvement of overall organizational effectiveness and capabilities.	3.18	.85
12. Examiners must have a full understanding of the role the Criteria play in organizational and personal learning.	3.14	.83
13. Examiners must have a full understanding of the role the core values and concepts play in the Criteria.	3.09	.61
20. Examiners understand that the Criteria support goal-based diagnosis.	2.91	.87
25. Examiners understand how to apply the terms in the Glossary of Key Terms.	2.86	.77
7. Examiners must learn how to assign an exact numeric score.	2.41	1.01

Ranking: **4: essential; 3: important,** but not essential; **2: helpful,** but not important; **1: unimportant,** should not be included

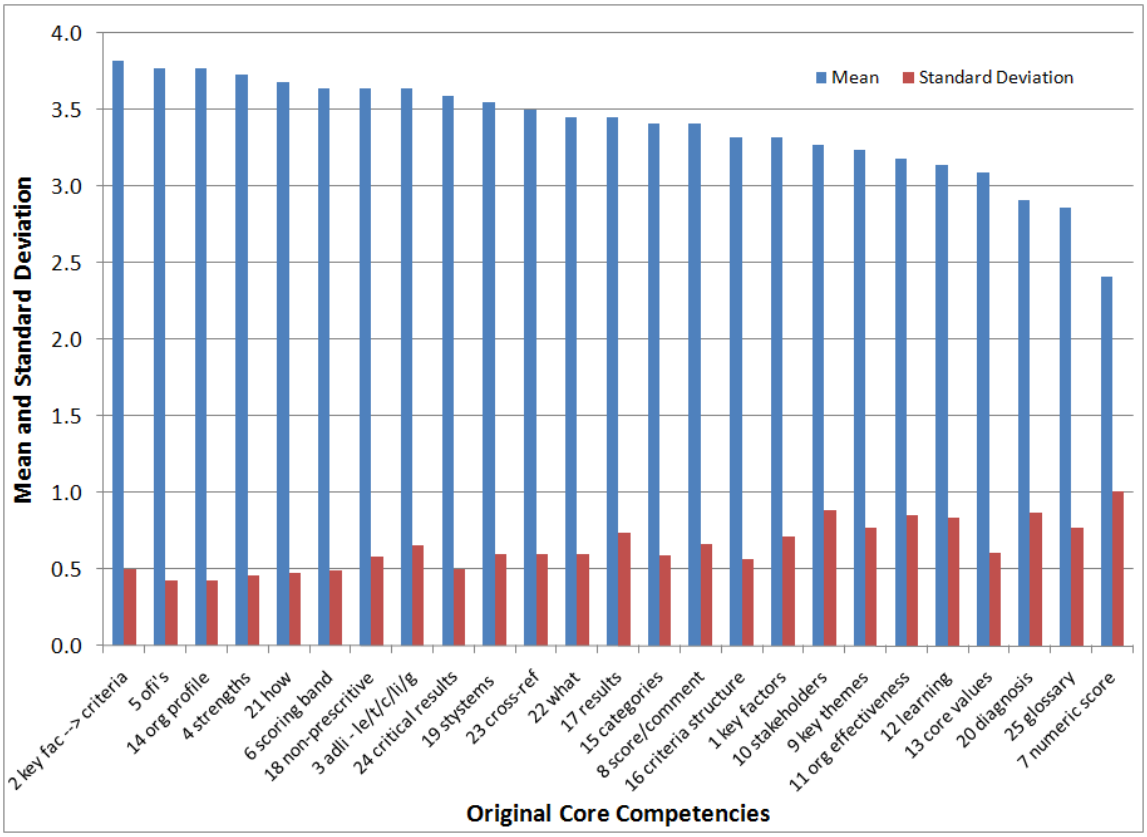

FIGURE 1. Round 1—Mean and deviation of original core competencies.

The next core competency was “Examiners learn to write opportunities for improvement (OFIs)” (item number 5).The Quality Texas *Examiner Reference Manual* (2007) defines an OFI comment as one that describes gaps in organizational process or results. OFIs should be constructed to enable an organization to understand what it needs to do to move its performance to the next level. This core competency had a first round group mean of 3.77 with a standard deviation of .43. Seventeen panelists ranked this item as 4 and five panelists ranked it as 3. This item is a skill required of all examiners in evaluating an application. Hence, it is understandable that most panelists would rank it as essential.

The next core competency was “Examiners must have a full understanding of the importance of the organizational profile in setting the context for the way the organization operates” (item number14). The organizational profile is a five page summary of the organization and is critical to an examiner’s understanding of what is important to the organization. The Baldrige National Quality Program explains to the applicant, “Your environment, key working relationships, and strategic challenges and advantages serve as an overarching guide for your organizational performance management system” (2009b, p. 1). This core competency had a first round group mean of 3.77 with a standard deviation of .43 just as the previous one. Seventeen panelists ranked this item as 4, while five panelists ranked it as 3.Hence the panel determined this core competency to be essential for examiners.

The next core competency was “Examiners must learn to write strengths” (item number 4). The Quality Texas *Examiner Reference Manual* (2007) defines a strength comment as one that describes organizational processes or results as meeting or exceeding Criteria requirements. Strength and OFI comments comprise the bulk of the feedback report that organizations receive as a result of the Baldrige based evaluation process. This core competency had a first round mean of 3.73 with a standard deviation of .46. Sixteen panelists ranked it as 4 and six ranked it as 3. That is sixteen panelists considered this skill essential while six considered it important. Given its status in the feedback to organizations it is expected that the majority of panelists would consider it essential. In fact, it is surprising that six panelists considered it only as important

and not essential. Overall, the panel as a whole determined this item to be essential.

The next core competency was “Examiners understand the meaning of ‘how’” (item number 21). The glossary of the Quality Texas *Examiner Reference Manual* (2007) defines “how” as follows:

> The term “how” refers to the systems and processes that an organization uses to accomplish its mission requirements. In responses to “how” questions in the Process Item requirements, process descriptions should include information such as approach (methods and measures), deployment, learning, and integration factors. (p. 55)

This item had a first round mean of 3.68 with a standard deviation of .48. Fifteen panel members ranked this item as 4, and seven ranked it as 3. Many Criteria process questions begin with “how.” Because of its importance in the Criteria, this item was considered by the panel to be essential for examiners.

The next core competency was “Examiners must learn to score within a range” (item number 6). The Criteria break the numeric score into scoring bands in the same way that educators have a range of numeric values comprising a grade of “A B, C. D, or F.” The following scoring ranges are used for Process items (categories 1 – 6): 0% – 5% indicates no systematic approach; 10% – 25% indicates the beginning of a systematic approach; 30% – 45% indicates an effective, systematic approach, responsive to the basic requirements; 50% – 65% indicates an effective, systematic approach, responsive to the overall requirements; 70% – 85% indicates an effective, systematic approach,

responsive to the multiple requirement; 90% – 100% indicates an effective, systematic approach, fully responsive to the multiple requirements (Baldrige National Quality Program, 2009b).

The first round group mean for this item was 3.64 with a standard deviation of .49. Fourteen panel members ranked this item as 4 while eight panel members ranked it as 3. Thus it is considered essential for examiners. The next core competency was “Examiners understand that the Criteria are non-prescriptive and adaptable” (item number 18). The Baldrige National Quality Program explains that the Criteria do not prescribe organizational structure, whether an organization should have various types of departments or whether the different units within an organization should be managed in like fashion (2009b). The Criteria are adaptable in allowing organizations to continually evolve their strategies to meet current demands. The first round group mean for this item was 3.64 with a standard deviation of .58. Fifteen panel members ranked this item as 4; six members ranked it as 3; and one ranked it as 2. The distribution across three rankings gave this item a higher standard deviation than the previous item which had the same group mean. The panel determined this core competency to be essential for examiners.

The next core competency was “Examiners must learn to evaluate an application in terms of A/D/L/I or Le/T/C/Li/G’s” (item number 3). The terms “A/D/L/I” refer to approach, deployment, learning, and integration. These are the ways organizations communicate their processes to examiners and the ways examiners evaluate organizational processes. “Approach,” according to the

National Baldrige Quality Program (2009b), refers to the methods organizations use to meet the Criteria process requirements. “Deployment,” according to the Quality Texas *Examiner Reference Manual* (2007), refers to the extent throughout organizations that processes are administered. “Learning,” according to the Quality Texas *Examiner Reference Manual* (2007), comprises both organizational and personal learning. Organizational learning includes research and development, applying and sharing best practices, and using employee and customer input. Personal learning includes education and developmental opportunities. “Integration,” according to the Quality Texas *Examiner Reference Manual* (2007), occurs when the various pieces of a management system are harmoniously interconnected into one smoothly functioning system that embodies organizational vision and mission.

The terms “Le/T/C/Li/G’s” refer to levels, trends, comparisons, linkage, and gaps. These terms apply to organizational results. The term “levels,” according to the Quality Texas *Examiner Reference Manual* (2007), refers to numerical performance. The term “trends,” according to the Quality Texas *Examiner Reference Manual* (2007), shows the direction and rate of performance improvements. The term “comparison,” according to the Quality Texas *Examiner Reference Manual* (2007), shows how the applicant’s results compare to competitors – locally and regionally, as well as to industry averages, and best-in-class organizations. The term “linkage,” according to the Quality Texas *Examiner Reference Manual* (2007), refers to both internal and external connections. An internal link might be a link between a results item and a

process item. An external link might be a link to a customer. The term “gaps,” according to the Quality Texas *Examiner Reference Manual* (2007), refers to results items specified by the Criteria which are missing in the application.

This core competency had a first round mean of 3.64 with a standard deviation of .66. Sixteen panelists ranked this item as 4; four panelists ranked it as 3; and two panelists ranked it as 2. The distribution across three rankings gave this item a higher standard deviation than previous items. One of the panelists who ranked it as 2 commented that examiners do need to understand this core competency but gave it a lower rank because of the word “must” in the phrasing of it. He further commented that his state organization does not have a column in which examiners specify A/D/L/I or Le/T/C/Li/G’s as some state organizations have, which is interesting in light of the National Baldrige program’s use of these terms in the assessment process. However, this expert explained that the worksheet for the independent review requires examiners to place check marks in the scoring band associated with approach, deployment, learning, integration, or levels, trends, comparisons, and linkages. The principles of approach, deployment, learning, integration, levels, trends, comparisons, and linkages are embedded in the questions which the Criteria pose. This item was determined by the panel to be essential.

The next core competency was “Examiners understand that the focus in the results items is on the most critical performance results” (item number 24). In other words, the results presented by an applicant are those which are important to the success of the applicant outlined in the organizational profile and aligned

with the strategic plan (Quality Texas, 2007). The first round group mean was 3.59 with a standard deviation of .50. Thirteen panel members ranked this item as 4, while nine ranked it as 3.

The next core competency was “Examiners understand that the Criteria support a systems perspective to maintaining organization-wide goal alignment” (item number 19). A systems perspective is holistic with the pieces of a system functioning interdependently in a way that promotes the smooth functioning of the system. The seven categories of the Baldrige Criteria together with the core values provide the structure for a systems perspective (Baldrige National Quality Program, 2009b). Integration and linkage among the categories determine whether an organization is fully utilizing the systems-based Criteria to achieve a systemically functioning organization (Baldrige National Quality Program, 2009b).

The Baldrige National Quality Program embeds a systems perspective in its Core Values and Concepts (2009b). These Core Values and Concepts include visionary leadership, customer-driven excellence, focus on the future, social responsibility, and focus on results and creating value. For example the core value of social responsibility is an example of a systems perspective in that an organization does not exist alone but in relationship to society. Alignment and interconnectivity between and among processes and results contribute to customer and stakeholder satisfaction in a systemic fashion (Baldrige National Quality Program, 2009b). Having leadership set a strategic direction based on results is an example of a systems perspective (Baldrige National Quality

Program, 2009b). “A systems perspective means managing your whole organization, as well as its components, to achieve success” (Baldrige National Quality Program, 2009b, p. 54).

The first round group mean was 3.55 with a standard deviation of .60. Thirteen panel members ranked this item as 4; eight panel members ranked it as 3; and one panel member ranked it as 2. This core competency deals with the philosophy underlying the Baldrige Criteria. It is noteworthy that the panel determined this abstract item to be essential.

The final core competency considered essential in the first round by the panel was “Examiners understand the importance of cross-references across categories” (item number 23). The first round group mean for this item was 3.50 with a standard deviation of .60. Twelve panel members ranked it as 4; nine ranked it as 3; and one ranked it as 2. This concept is somewhat more nebulous than a skill such as writing a strength comment. It involves seeing how an answer to one Criteria item links to another Criteria item in a different section. Familiarity with the Criteria is important in developing this competency. The panel determined this item to be essential for examiners.

The eleven core competencies discussed thus far for Round 1 had first round group means at least equal to 3.50 and are therefore considered essential. Specific skills such as relating key factors to the Criteria, writing strengths and OFIs, and scoring an application within a range are at the core of what examiners do. Some of the other items deemed essential involve abstract

concepts such as understanding the organizational profile and the role of systems thinking.

The next thirteen core competencies were considered important by the expert panel in the first round of the survey. That is, these core competencies had a first round group mean of at least 2.50 and less than 3.50.

The first core competency considered important in the first round was "Examiners understand the meaning of what'" (item number 22). Some of the questions in the Criteria are "how" questions, while others are "what" questions. The core competency for understanding "how" was deemed essential in the first round while understanding "what" was deemed important by the panel members. The Baldrige National Quality Program (2009b) explains that the Criteria have two kinds of "what" questions:

> The first type of question requests basic information on key processes and how they work. Although it is helpful to include *who* performs the work, merely stating *who* does not permit diagnosis or feedback. The second type of question requests information on *what* your key findings, plans, objectives, goals, or measures are. These latter questions set the context for showing alignment and integration in your performance management system. (p. 31-32)

The first round group mean was 3.45 with a standard deviation of .60. Eleven panelists ranked this item as 4; ten panelists ranked it as 3; and one panelist ranked it as 2.

The next core competency considered important in the first round was "Examiners understand that the Criteria focus on results" (item number 17). The Baldrige National Quality Program (2009b) explains

> The term "results" refers to outputs and outcomes achieved by an organization in addressing the requirements of a Baldrige Criteria Item. Results are evaluated on the basis of current performance; performance relative to appropriate comparisons; the rate, breadth, and importance of performance improvements; and the relationship of results measures to key organizational performance requirements. (p. 61-62)

The first round group mean for this item was 3.45 with a standard deviation of .74. Thirteen panel members ranked this item as 4; six members ranked it as 3; and three members ranked it as 2.

The next core competency considered important in the first round was "Examiners must have a full understanding of the systems operations (categories 1, 2, 3, 5, 6, and 7) and the systems foundation (category 4)" (item number 15). The Baldrige National Quality Program (2009b) divides the systems operations into two triads: leadership and results. The leadership triad comprises the first three categories of leadership, strategic planning, and customer and market focus. The results triad comprises the last three categories of workforce focus, process management, and results. These two triads are linked with information flowing in both directions between the triads. The systems foundation is the category of measurement, analysis, and knowledge

management. These functions are necessary in order for an organization to improve its performance management system based on measurement and facts.

This item had a first round group mean of 3.41 with a standard deviation of .59. Ten panel members ranked it as 4; eleven members ranked it as 3; and one member ranked it as 2.

The next core competency considered important in the first round was “Examiners must learn to verify the score/comment balance” (item number 8). This competency refers to the appropriateness of having the numeric score reflect the ratio of strengths to OFIs. For example, it would be expected that a numeric score of 100% would have only strengths, while a score of 10% might have only OFIs. This item represents a teachable skill. The first round group mean for this item was 3.41 with a standard deviation of .67. Eleven panel members ranked this item as 4; nine panel members ranked it as 3; and two panel members ranked it as 2.

The next core competency considered important in the first round was “Examiners must have a full understanding of the criteria structure with its subsets of Items and Areas to Address” (item number 16). The Baldrige-based Criteria manuals provide the questions which applicants answer. Applicants that are able to answer the detailed questions found in the subsets show greater maturity in terms of Baldrige-based performance excellence. This item had a first round group mean of 3.32 with a standard deviation of .57. Eight panel members ranked this item as 4; thirteen members ranked it as 3; and one member ranked

it as 2. It is somewhat puzzling why all the panelists did not consider this competency as essential given its foundational aspect in utilizing the Criteria.

The next core competency considered important in the first round was "Examiners must learn to write key factors" (item number 1). Key factors are those elements which an applicant considers essential to its organization. These key factors are usually found in the five page organizational profile that acts as a prologue to the application. This item represents a teachable skill. The first round group mean for this item was 3.32 with a standard deviation of .72. Ten panel members ranked this item as 4; nine ranked it as 3; and three ranked it as 2.

The next core competency considered important in the first round was "Examiners must have a full understanding of the role that the Criteria play in contributing value to customers and stakeholders and organizational sustainability" (item number 10). The thread of contributing value to customers and stakeholders runs throughout the Criteria. This item had a first round group mean of 3.27 with a standard deviation of .88, which is the highest standard deviation of the core competencies considered thus far and the highest standard deviation of the core competencies deemed important in the first round. The distribution over all four rankings and lack of strong clustering around any of the ranks account for the high standard deviation. Eleven panel members ranked this item as 4; seven members ranked it as 3; three members ranked it as 2; and one member ranked it as 1.

The next core competency considered important in the first round was "Examiners must learn to write key themes" (item number 9). Key themes, which are synthesized from the comments, provide the applicant with an executive summary of its strengths and OFIs. As the Quality Texas *Examiner Reference Manual* (2007) explains, examiners write key themes as part of the independent review process. Specifically, examiners review significant strengths and best practices that appear in the application. Examiners also look for linkages across categories in preparing strength key themes. With respect to OFI key themes, examiners look for major concerns, vulnerabilities, or gaps in the application. Examiners also look for a lack of linkage across categories. For example, if an applicant refers to measurements in category 4, but has no related results in category 7, there is a lack of linkage.

The first round group mean for this item was 3.24 with a standard deviation of .77. Nine panel members ranked this item as 4; nine members ranked it as 3; and four members ranked it as 2. One of the experts commented that new examiners are not expected to be proficient at writing comments and key themes. Because it takes a few years to become proficient, senior examiners mentor examiners during their first two years.

The next core competency considered important in the first round was "Examiners must have a full understanding of the role the Criteria play in the improvement of overall organizational effectiveness and capabilities" (item number 11). The reason organizations apply Baldrige principles is to improve organizational effectiveness and capabilities. The Criteria steer organizations

toward this end. The first round group mean for this item was 3.18 with a standard deviation of .85. Eleven panel members ranked this item as 4; seven members ranked it as 3; three members ranked it as 2; and one member ranked it as 1.

The next core competency considered important in the first round was "Examiners have a full understanding of the role the Criteria play in organizational and personal learning" (item number 12). There are questions throughout the Criteria which refer to how the applicant addresses organizational and personal learning. The Glossary of the Baldrige National Quality Program (2009b) defines "learning" as follows:

> The term "learning" refers to new knowledge or skills acquired through evaluation, study, experience, and innovation. The Baldrige Criteria include two distinct kinds of learning: organizational and personal. Organizational learning is achieved through research and development, evaluation and improvement cycles, workforce and stakeholder ideas and input, best-practice sharing, and benchmarking. Personal learning is achieved through education, training, and developmental opportunities that further individual growth.
>
> To be effective, learning should be embedded in the way an organization operates. Learning contributes to a competitive advantage and sustainability for the organization and its workforce. (p. 60)

The first round group mean for this item was 3.14 with a standard deviation of .83. Eight panel members ranked this item as 4; ten members ranked it as 3; three members ranked it as 2; and one member ranked it as 1.

The next core competency considered important in the first round was "Examiners must have a full understanding of the role the core values and concepts play in the Criteria" (item number 13). These values, as specified in the *Criteria for Performance Excellence* (Baldrige National Quality Program, 2009b), are "visionary leadership, customer-driven excellence, organizational and personal learning, valuing workforce members and partners, agility, focus on the future, managing for innovation, management by fact, focus on results and creating value, systems perspective." The principle is that these values are found in organizations which excel and these values promote action, feedback, and the integration of key performance and operational requirements with results (Baldrige National Quality Program, 2009b). The first round group mean for this item was 3.09 with a standard deviation of .61. Five panel members ranked this item as 4; fourteen ranked it as 3; and three ranked it as 2. Given the emphasis that the Criteria place on the core values, it is somewhat surprising that this core competency was not ranked considerably higher.

The next core competency considered important in the first round was "Examiners understand that the Criteria support goal-based diagnosis" (item number 20). The Baldrige National Quality Program (2009b) explains how the Criteria support goal-based diagnosis as follows:

> The Criteria and the Scoring Guidelines make up a two-part diagnostic (assessment) system. The Criteria are a set of 18 performance-oriented requirements. The Scoring Guidelines spell out the assessment dimensions—Process and Results—and the key factors used to assess each dimension. An assessment thus provides a profile of strengths and opportunities for improvement relative to the 18 performance-oriented requirements and relative to process and performance maturity as determined by the Scoring Guidelines. (p. 55)

The first round group mean for this item was 2.91 with a standard deviation of .87. Five panel members ranked this item as 4; twelve members ranked it as 3; three members ranked it as 2; and two members ranked is as 1.

The final core competency considered important in the first round was "Examiners understand how to apply the terms in the Glossary of Key Terms" (item number 25). Such terms as "approach" and "deployment" which examiners use in their evaluations are included in the Glossary of Key Terms. This item had a first round group mean of 2.86 with a standard deviation of .77. Four panel members ranked it as 4; twelve members ranked it as 3; five members ranked it as 2; and one member ranked it as 1.

For these thirteen core competencies with first round group means between 2.50 and 3.49 and therefore considered important, the standard deviations were generally greater than those for the first round core competencies considered essential due to the lack of clustering around one ranking and the distribution across three or all four ranks. Nine of the thirteen

important core competencies stressed understanding of a concept with the remaining four focused on a teachable skill.

One of the experts commented that she objected to the expression *full understanding* as it seems impossible for examiners to gain a full understanding of all the teachings at the training workshops.

The last core competency in the first round was “Examiners must learn how to assign an exact numeric score” (item number 7). A similar core competency which was considered essential refers to the need for examiners to learn to score within a range. The panel members suggest that while scoring is essential, it is only how to score within a range rather than scoring an exact number which is essential for examiners to learn. The first round group mean for this item was 2.41 with a standard deviation of 1.01, the highest standard deviation of all the original core competencies. Four panel members ranked it as 4; five members ranked it as 3; nine members ranked it as 2; and four members ranked it as 1. This is the only core competency in this first round which the panel considered helpful but not important.

Round 2. The Original Core Competencies

The original core competencies were repeated in the second round of the survey to give the Delphi panel members the opportunity to change their rankings in light of the group mean. One panel member who participated in Round 1 dropped out so that there were twenty-one Delphi Panel members in Round 2. In this second round, the survey reflected each item’s group mean and

standard deviation from Round 1 as well as the ranking of each item by the panel member to whom the survey was sent. In observance of confidentiality, no panel member saw another panel member's individual responses.

By contrasting the frequency of responses in the first two rounds, the stability of each item was calculated. The twenty-one rankings for the experts participating in this round were correlated with the rankings of those twenty-one experts from Round 1 in calculating the stability of each item. All twenty-five original core competencies, which were derived from the literature, were stable. As these core competencies came from the Criteria, it is expected that the Delphi panel members would consense on these. Stability, as defined in Chapter III, is a measure of consensus.

Table 2 and Figure 2 depict the original core competencies in descending order by group means at the end of Round 2. Because all original core competencies were stable, these are the final group means. Slight changes in group means from Round 1 to Round 2 resulted in slight reordering of the core competencies.

There were two core competencies with the same highest final group mean and standard deviation in Round 2. The first of these was "Examiners must learn to write opportunities for improvement (OFIs)" (item number 5). The final group mean was 3.81 with a standard deviation of .40. Seventeen panel members ranked this item as 4 and four members ranked it as 3.

TABLE 2. Mean and Standard Deviation of Original Core Competencies, Round 2 Results

Core Competencies	Mean Round 2 Results	Standard Deviation Round 2 Results
5. Examiners must learn to write opportunities for improvement (OFI's).	3.81	.40
14. Examiners must have a full understanding of the importance of the organizational profile in setting the context for the way the organization operates.	3.81	.40
2. Examiners must learn to relate specific key factors to Criteria items.	3.81	.51
4. Examiners must learn to write strengths.	3.76	.44
21. Examiners understand the meaning of "how."	3.71	.46
18. Examiners understand that the Criteria are non-prescriptive and adaptable.	3.71	.56
6. Examiners must learn how to score within a range.	3.62	.50
24. Examiners understand that the focus in the results items is on the most critical organizational performance results.	3.62	.50
3. Examiners must learn to evaluate an application in terms of A/D/L/I or Le/T/C/Li/G's.	3.62	.67
23. Examiners understand the importance of cross-references across categories.	3.58	.51
17. Examiners understand that the Criteria focus on results.	3.52	.68
8. Examiners must learn to verify the score/comment balance.	3.48	.60
19. Examiners understand that the Criteria support a systems perspective to maintaining organization-wide goal alignment.	3.43	.75
22. Examiners understand the meaning of "what."	3.38	.67
1. Examiners must learn to write meaningful key factors.	3.33	.66
11. Examiners must have a full understanding of the role the Criteria play in the improvement of overall organizational effectiveness and capabilities.	3.33	.86
16. Examiners must have a full understanding of the criteria structure with its subsets of Items and Areas to Address.	3.24	.70
15. Examiners must have a full understanding of the system operations (categories 1, 2, 3, 5, 6, and 7) and the system foundation (category 4).	3.24	.77
9. Examiners must learn to write key themes.	3.19	.88
10. Examiners must have a full understanding of the role that the Criteria play in contributing value to customers and stakeholders and organizational sustainability.	3.14	.96
13. Examiners must have a full understanding of the role the core values and concepts play in the Criteria.	3.10	.70
12. Examiners must have a full understanding of the role the Criteria play in organizational and personal learning.	2.95	.87
20. Examiners understand that the Criteria support goal-based diagnosis.	2.86	.73
25. Examiners understand how to apply the terms in the Glossary of Key Terms.	2.86	.79
7. Examiners must learn how to assign an exact numeric score.	2.38	.97

Ranking: **4: essential; 3: important,** but not essential; **2: helpful,** but not important; **1: unimportant,** should not be included

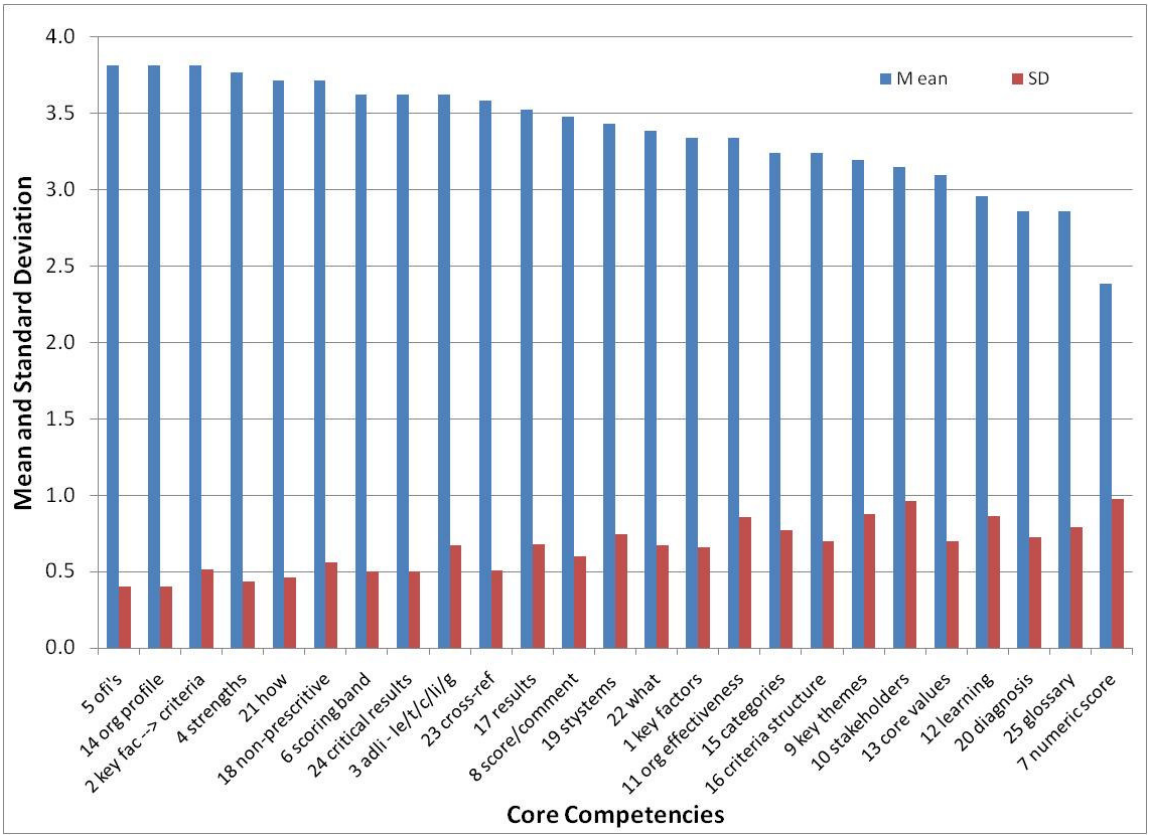

FIGURE 2. Round 2—Mean and deviation of original core competencies.

Similarly, the tie for the highest final group mean and same standard deviation was “Examiners must have a full understanding of the importance of the organizational profile in setting the context for the way the organization operates” (item number 14). Naturally, the frequency of responses was also the same for this item as for the previous item.

The next core competency in this round was “Examiners must learn to relate specific key factors to criteria items” (item number 2). It also had a final group mean of 3.81; however, the standard deviation was .51 because of the distribution across three rankings. Eighteen panel members ranked it as 4; two members ranked it as 3; and one member ranked it as 2.

The next core competency was “Examiners must learn to write strengths” (item number 4). This item had a final group mean of 3.76 with a standard deviation of .44. Sixteen panel members ranked this item as 4, and five members ranked it as 3.

The next core competency was “Examiners understand the meaning of ‘how’” (item number 21). This item had a final group mean of 3.71 with a standard deviation of .46. Fifteen panel members ranked this item as 4, and six members ranked it as 3.

The next core competency was “Examiners understand that the Criteria are non-prescriptive and adaptable” (item number 18). This item also had a final group mean of 3.71 but with a standard deviation of .56. Sixteen panel members ranked this item as 4; four members ranked it as 3; and one member ranked it as 2.

The next two core competencies had the same final group mean, standard deviation, and frequency distribution. The two core competencies were “Examiners must learn how to score within a range” (item number 6); and “Examiners understand that the focus in the results items is on the most critical organizational performance results” (item number 24). The final group mean for these two items was 3.62 with a standard deviation of .50. Thirteen panel members ranked these items as 4, and eight members ranked them as 3.

The next core competency was “Examiners must learn to evaluate an application in terms of A/D/L/I or Le/T/C/Li/G’s. This item also had a final group

mean of 3.62 but the standard deviation was .67. Fifteen panel members ranked this item as 4; four members ranked it as 3; and two members ranked it as 2.

The next core competency was “Examiners understand the importance of cross-references across categories” (item number 23). This item had a final group mean of 3.58 with a standard deviation of .51. Eleven panel members ranked this item as 4, and ten members ranked it as 3.

The next core competency was “Examiners understand that the Criteria focus on results” (item number 17). This item had a final group mean of 3.52 with a standard deviation of .68. Thirteen panel members ranked it as 4; six members it as 3; and two members ranked it as 2.

All of the items thus far had means at least equal to 3.50, and were therefore considered essential. The rest of the core competencies except the last one had means at least equal to 2.5 but less that 3.5 and were therefore considered important.

The next core competency was “Examiners must learn to verify the score/comment balance” (item number 8). This item had a final group mean of 3.48 with a standard deviation of .60. Eleven panel members ranked this item as 4; nine members ranked it as 3; and one member ranked it as 2.

The next core competency was “Examiners understand that the Criteria support a systems perspective to maintaining organization-wide goal alignment” (item number 19). This item had a final group mean of 3.43 with a standard deviation of .75. Eleven panel members ranked this item as 4; nine members ranked it as 3; and one member ranked it as 1.The distribution from the rank of 4

to the rank of 1 caused the standard deviation to be higher than previous standard deviations.

The next core competency was “Examiners understand the meaning of ‘what’” (item number 22). This item had a final group mean of 3.38 with a standard deviation of .67. Ten panel members ranked this item as 4; nine members ranked it as 3; and two members ranked it as 2.

The next core competency was “Examiners must learn to write meaningful key factors” (item number 1). This item had a final group mean of 3.33 with a standard deviation of .66. Nine panel members ranked this item as 4; ten members ranked it as 3; and two members ranked it as 2.

The next core competency was “Examiners must have a full understanding of the role the Criteria play in the improvement of overall organizational effectiveness and capabilities” (item number 11). This item also had a final group mean of 3.33 but with a standard deviation of .86. Ten panel members ranked this item as 4; eight members ranked it as 3; two members ranked it as 2; and one member ranked it as 1. The distribution over all four rankings gave this item a higher standard deviation than the previous one, which had the same mean.

The next core competency was “Examiners must have a full understanding of the criteria structure with its subsets of Items and Areas to Address” (item number 16). This item had a final group mean of 3.24 with a standard deviation of .70. Seven panel members ranked this item as 4; thirteen members ranked it as 3; and one member ranked it as 1.

The next core competency was “Examiners must have a full understanding of the system operations (categories 1, 2, 3, 5, 6, and 7) and the system foundation (category 4)” (item number 15). This item also had a final group mean of 3.24 but with a standard deviation of .77. Eight panel members ranked it as 3; eleven members ranked it as 3; one member ranked it as 2; and one member ranked it as 1.

The next core competency was “Examiners must learn to write key themes” (item number 9). This item had a final group mean of 3.19 with a standard deviation of .88. Nine panel members ranked this item as 4; eight members ranked it as 3; three members ranked it as 2; and one member ranked it as 1.

The next core competency was “Examiners must have a full understanding of the role that the Criteria play in contributing value to customers and stakeholders and organizational sustainability” (item number 10). This item had a final group mean of 3.14 with a standard deviation of .96. Nine panel members ranked it as 4; eight members ranked it as 3; two members ranked it as 2; and two members ranked it as 1.

The next core competency was “Examiners must have a full understanding of the role the core values and concepts play in the Criteria” (item number 13). This item had a final group mean of 3.10 with a standard deviation of .70. Five panel members ranked this item as 4; fourteen members ranked it as 3; one ranked it as 2; and one ranked it as 1.

The next core competency was “Examiners must have a full understanding of the role the Criteria play in organizational and personal learning” (item number 12). This item had a final group mean of 2.95 with a standard deviation of .87. Six panel members ranked this item as 4; eleven members ranked it as 3; two members ranked it as 2; and two members ranked it as 1.

The next core competency was “Examiners understand that the Criteria support goal-based diagnosis” (item number 20). The final group mean for this item was 2.86 with a standard deviation of .73. Three panel members ranked this item as 4; thirteen members ranked it as 3; four members ranked it as 2; and one member ranked it as 1.

The final core competency which was considered important in this round was “Examiners understand how to apply the terms in the Glossary of Key Terms” (item number 25). This item had a final group mean of 2.86 with a standard deviation of .79. Four panel members ranked this item as 4; eleven members ranked it as 3; five members ranked it as 2; and one member ranked it as 1.

The last of the original core competencies was “Examiners must learn how to assign an exact numeric score” (item number 7). This item had a final group mean of 2.38 with a standard deviation of .97. Three panel members ranked this item as 4; six members ranked it as 3; eight members ranked it as 2; and four members ranked it as 1. As this item’s mean was less than 2.5, it was considered helpful. A similar item about scoring within a range was considered

essential. Hence, the experts agreed that it is essential for examiners to learn to score within a range, but it is not important for examiners to learn how to assign an exact numeric score.

Summary of Findings for the Original Core Competencies – Research Question 1

In summary, one item considered essential in Round 1 was deemed important in Round 2, while another item considered important in Round 1 was elevated to essential in Round 2. Item number 17, “Examiners understand that the Criteria focus on results,” had a first round group mean of 3.45 with a standard deviation of .74. This item had a second round group mean of 3.52 with a standard deviation of .68. In terms of the frequency of responses in the first round, where the item was considered important but not essential, if only the twenty-one rankings for the experts who also participated are considered for purposes of correlation, the frequency results are as follows: In the first round, thirteen panel members ranked it as 4; five members ranked it as 3; and three members ranked it as 2. In the second round, thirteen members ranked it as 4; six members ranked it as 3; and two members ranked it as 2. In other words, one person changed his or her ranking from 2 in Round 1 to 3 in Round 2, which change caused the item to move from being considered important to being considered essential. Because the sample consists of only twenty-one subjects, one change in ranking caused a change in classification from important to essential.

Similarly, item 19, “Examiners understand that the Criteria support a systems perspective to maintaining organization-wide goal alignment,” was considered essential in Round 1 with a mean of 3.55 and was relegated to important in Round 2 with a mean of 3.43. In terms of the frequencies for the twenty-one experts participating in both rounds, there were two changes. One of the 4’s in Round 1 became a 3 in Round 2, and the one 2 in Round 1 became a 1 in Round 2.

In summary, all of the original core competencies, which came from the National Baldrige Criteria for Performance Excellence, achieved stability in the second round. The panel consensed quickly on these core competencies. Several of these core competencies were considered essential with means at least equal to 3.5 as Table 1 and Figure 1 of Chapter IV illustrate. Core competencies related to an understanding of the Criteria and core competencies related to comment writing and scoring within a range were considered essential for examiners to know. At the lowest end of the range the core competency dealing with assigning an exact numeric score was considered helpful, but not important. There were no core competencies which the panel deemed unimportant and should not be included. At the end of Round 2, which was the final round for the twenty-five original core competencies there were eleven core competencies that were considered essential, thirteen considered important, and one which was considered helpful. None of the core competencies was considered unhelpful.

It is thus important to keep in mind the purpose of this research question, which is to offer a set of core competencies needed by examiners in state Baldrige organizations. The second salient finding was that as the means decreased the standard deviations increased because there was less agreement on the rankings. That is, there was less clustering around one number as well as a wider distribution among three or all four rankings associated with higher standard deviations. Generally, for the items considered essential, the experts agreed on the rank which produced higher means and lower standard deviations.

Round 2. Core Competencies Added by the Delphi Panel: Initial Ranking

As part of what was asked of the panel in Round 1, the panel members suggested core competencies. These core competencies were included in Round 2 for initial ranking by the panel. Panel members suggested both core competencies and best practices. Six of the items believed by the panel to be best practices fit the definition of core competencies. In Round 2, these six items were listed under best practices, but were moved to core competencies in subsequent rounds. For the purposes of analysis and comparison to determine stability, these six have been included in the core competency section of data analysis of this research study. Hence they are included in Table 3 and Figure 3.

The core competencies suggested by the panel are provided in Table 3 and Figure 3 in order of descending means. Twenty-one experts participated in Round 2.

TABLE 3. Mean and Standard Deviation of Core Competencies Added by the Delphi Panel, Round 2 Results

Core Competencies	Mean Round 2 Results	Standard Deviation Round 2 Results
6. Examiners meet deadlines.	3.90	.30
9. Examiners abide by Conflict of Interest and Code of Conduct rules.	3.86	.48
5. Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results.	3.81	.40
11. Examiners understand a process for evaluating the application.	3.52	.51
16. Examiners are willing to ask for help and receive it.	3.52	.51
19. Examiners understand how to complete each step of the examination process.	3.43	.60
25. Examiners need to understand the consensus process and how it affects the score.	3.43	.60
26. Examiners must understand the site visit, what it is for, how to ask questions, how to **document** findings, how those findings clarify/verify site visit issues, and how the findings should be the basis for their conclusions to resolve the site visit issues.	3.38	.74
4. Examiners know how to give targeted feedback comments that help the applicant move forward on its quality journey but with carefully constructed comments that are not too prescriptive.	3.38	.92
7. Examiners consolidate comments to represent the findings and score of the team.	3.33	.73
14. Examiners exhibit a sense of commitment to the process.	3.33	.80
1. Examiners can function effectively as team members.	3.29	.85
15. Examiners listen to and learn from other team members.	3.24	.54
12. Examiners understand the steps in the site visit process including how to identify site visit issues and how to develop site visit worksheets.	3.19	.93
13. Examiners leave the training with a sense of confidence in their ability to perform successfully as examiners.	3.14	.73
20. Examiners understand that the Criteria are complex but not complicated. That is, the Criteria are complex because they consist of several parts, which are linked holistically, but they are not complicated because they can be understood and explained.	3.14	.79
8. Examiners accurately apply “considerations for a small organization” as developed by NIST. (See attached.)	3.10	.63
18. Examiners understand common terminology used during training and the examination process that may not appear in the Criteria glossary.	3.00	.78
23. Examiners learn to prepare for site visits.	3.00	.95
3. Examiners know how to adapt their experience and sector knowledge to the applicant’s sector as they give feedback comments.	2.95	.67
10. Examiners learn to include “so whats” for both strengths and OFI’s.	2.95	.87
24. Examiners need to identify only the scoring band for consensus.	2.81	.98
17. Examiners fully understand the entire award process.	2.71	.64
2. Examiners know how to redefine their assessment approach and feedback comments (the learning from training focuses on Award level assessment) to writing comments at other levels of applications (i.e., Level 1 or Level 2 application criteria).	2.57	.98
22. Examiners learn to identify best practices.	2.43	.81
21. Examiners get a glimpse of the judging process so that they understand the effect of their work.	2.10	.77

Ranking: **4: essential; 3: important,** but not essential; **2: helpful,** but not important; **1: unimportant,** should not be included

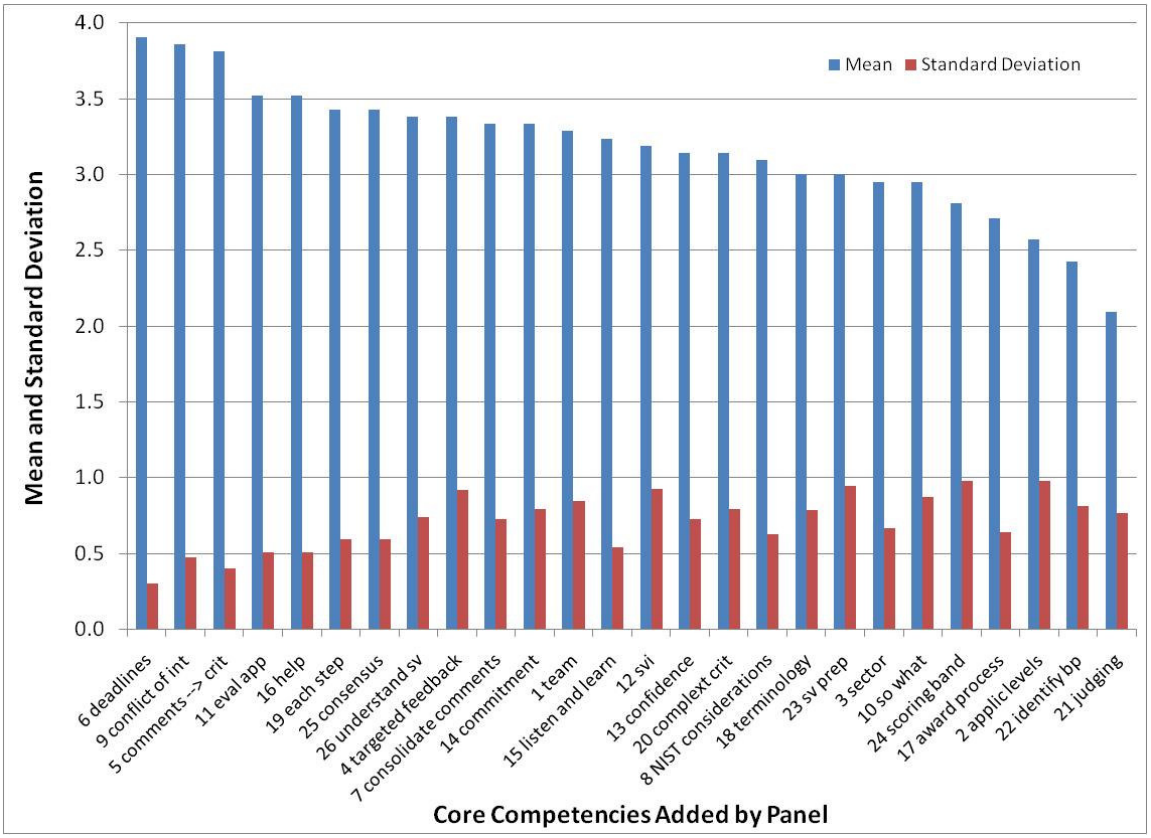

FIGURE 3. Round 2—Mean and standard deviation of core competencies added by panel.

The highest ranking core competency was “Examiners meet deadlines” (item number 6). Time demands can be pressing for examiners. The time to read and evaluate a fifty page application takes roughly fifty hours. The evaluation must be completed before the consensus telephone call. Being on time for conference call is imperative as the call cannot begin until all are present. The initial group mean for this item was 3.90 with a standard deviation of .30. Eighteen panel members ranked this item as 4, and three members ranked it as 3. The strong clustering around one rank with a distribution across only two ranks gave this item a low standard deviation. This is one of the highest ranked items with one of the lowest standard deviations. As essential as this

item is considered by the panel, are there any best practices for teaching examiners to meet deadlines?

The next core competency was “Examiners abide by the Conflict of Interest and Code of Conduct rules” (item number 9). Before evaluating an application, each examiner must agree in writing to abide by the aforementioned rules. It is imperative that the examiner have no ties to the applicant. Each examiner must also agree to behave ethically and legally. The initial group mean for this item was 3.86 with a standard deviation of .48. Nineteen panel members ranked this item as 4; one member ranked it as 3; and one member ranked it as 2. While the clustering around rank 4 was higher than for the previous item, the distribution across three rankings caused this item’s standard deviation to be higher than the previous item’s standard deviation. While examiner trainers may emphasize the significance of these rules as they explain the rules, the question arises as to whether there are best practices for teaching examiners to abide by these rules.

The next core competency was “Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results” (item number 5). This item represents a teachable skill dealing with comment writing. In particular, this item integrates the Baldrige Criteria with elements important to the applicant. This item had an initial group mean of 3.81with a standard deviation of .40. Seventeen panel members ranked this item as 4, and four members ranked it as 3.

The next core competency was “Examiners understand a process for evaluating the application” (item number 11). Processes for evaluating applications may vary somewhat from state to state; however, in keeping with Baldrige Criteria, each state would be expected to have a process for examiners to follow. One state, for example encourages examiners to read the entire application before beginning the written evaluation. Furthermore, instead of proceeding in numerical order, examiners are encouraged to pair process items with their associated results items. The initial group mean for this item was 3.52 with a standard deviation of .51. This item and the following item had identical group means and standard deviations; hence the ranking distributions for these were also the same. Eleven panel members ranked these items as 4, and ten members ranked it as 3.

The next core competency was “Examiners are willing to ask for help and receive it” (item number 16). This is an interesting item as it addresses the personalities of examiners. Some people readily ask questions while others are shy. While trainers may encourage examiners to ask for help, is this item a teachable skill with best practices for teaching it? The initial group mean was 3.52 with a standard deviation of .51. The distribution of responses has already been discussed in the previous paragraph.

The five core competencies added by the panel discussed thus far were all considered essential by the panel during the initial ranking. The next nineteen core competencies with means ranging from 2.57 – 3.43 were considered important by the panel.

The next core competency was “Examiners understand how to complete each step of the examination process” (item number 19). This item is similar to item 11 above. This item (19) specifies that examiners understand how to implement a process while the higher ranking item (11) only asks examiners to understand the process. This item and the next item (25) had an initial group mean of 3.43 with a standard deviation of .60. For both of these items ten panel members ranked them as 4; ten members ranked them as 3; and one member ranked them as 2.

The next core competency was “Examiners need to understand the consensus process and how it affects the score” (item number 25). The focus of this research project was on the initial examiner training prior to the independent review and evaluation. After examiners evaluate applications independently they meet, often via telephone, to discuss each item in the application and arrive at a team consensus with collaborative comments and a team score. This item like the preceding one had an initial group mean of 3.43 with a standard deviation of .60 and the same distribution as the preceding item.

The next two core competencies had the same initial mean but different standard deviations and distributions. The first of these two was “Examiners must understand the site visit, what it is for, how to ask questions, how to document findings, how those finding clarify/verify site visit issues, and how the findings should be the basis for their conclusions to resolve the site visit issues” (item number 26). Again, the focus of this study was the initial examiner training, which may or may not go into depth about site visits, which typically take place

months after the initial training. Some states may provide an overview of the site visit during the initial training and in-depth training prior to the time of the site visit. Some states give site visits to all award level applicants and some states give site visits to selected applicants. While examiners glean much about an applicant from the fifty page application, the application spawns additional questions. Examiners learn how to formulate these questions in order to either verify what is written in the application or to clarify points made or omitted in the application. The initial group mean for this item was 3.38 with a standard deviation of .74. Ten panel members ranked this item as 4; seven members ranked it as 3; and four members ranked it as 2.

The next core competency was “Examiners know how to give targeted feedback comments that help the applicant move forward on its quality journey but with carefully constructed comments that are not too prescriptive” (item number 4). This item is similar to core competency 18 in the original core competencies in Tables 1 and 2. The Baldrige Criteria specify that comments are non-prescriptive. The core competency added by the panel in this round goes further than the original core competency by urging examiners to provide targeted feedback that will help the applicant improve its performance. The initial group mean for this item was 3.38 with a standard deviation of .92. Thirteen panel members ranked this item as 4; six members ranked it as 3; and two members ranked it as 1.

The next core competency was “Examiners consolidate comments to represent the findings and score of the team” (item number 7). This comment

refers to the consensus process and suggests that in addition to teaching examiners how to independently evaluate applications, trainers should also instruct examiners on letting go of their independent evaluations in favor of the team evaluation. The initial group mean for this item was 3.33 with a standard deviation of .73. Nine panel members ranked this item as 4; ten members ranked it as 3; one member ranked it as 2; and one member ranked it as 1.

The next core competency was “Examiners exhibit a sense of commitment to the process” (item number 14). Because of the huge demands on examiners time, examiners must be committed to participating fully. Furthermore, the process itself guides the work in a way that goes beyond the independent review to a team effort. The initial group mean was 3.33 with a standard deviation of .80. Ten panel members ranked this item as 4; nine members ranked it as 3; one member ranked it as 2; and one member ranked it as 1.

The next core competency was “Examiners can function effectively as team members” (item number 1). This item takes examiners beyond the independent review to the consensus process and possibly the site visit where working as a team member is critical. Is this competency one which can be taught or is it perhaps a personality trait? The initial group mean for this item was 3.25 with a standard deviation of .85. Ten panel members ranked this item as 4; eight members ranked it as 3; two members ranked it as 2; and one member ranked it as 1.

The next core competency was “Examiners listen to and learn from other team members” (item number 15). This item also addresses the importance of functioning as a team member. The initial group mean was 3.24 with a standard deviation of .54. Six panel members ranked this item as 4; fourteen members ranked it as 3; and one member ranked it as 2.

The next core competency was “Examiners understand the steps in the site visit process including how to identify site visit issues and how to develop site visit worksheets” (item number 12). This item is similar to item 26 above and 23 below in that these items all pertain to site visit training during the initial examiner training. This particular item and item 23 aim at the preparatory work before the site visit while item 26 refers to the work involved during the actual site visit, and item 23. This item simply expects examiners to understand the site visit process, while item 23 expects examiners to actually learn to prepare for site visits. For all three items the panel determined that addressing the site visit was important during the initial examiner training. The initial group mean was 3.19 with a standard deviation of .93. Nine panel members ranked this item as 4; nine members ranked it as 3; one member ranked it as 2; and two members ranked it as 1.

The next core competency was “Examiners leave the training with a sense of confidence in their ability to perform successfully as examiners” (item number 13). Sometimes new examiners exclaim that they feel overwhelmed by the enormous amount of new material written with many words having specific Baldrige definitions. Additionally, the case study, if used, may lie outside an

examiner's sector so that the examiner may feel lost in that sector-specific language with its own set of government regulations. The initial group mean for this item was 3.1 with a standard deviation of .73. Six panel members ranked this item as 4; thirteen panel members ranked it as 3; one member ranked it as 2; and one member ranked it as 1.

The next core competency was "Examiners understand the Criteria are complex but not complicated. That is, the Criteria are complex because they consist of several parts, which are linked holistically, but they are not complicated because they can be understood and explained" (item number 20). This item relates to the one preceding it in that it aims to demystify the Criteria, which would aid in giving examiners confidence as examiners. This item, unlike the more abstract preceding item, is a teachable skill. Both items had the same initial group mean of 3.14, but this item had a standard deviation of .79. Seven panel members ranked this item as 4; eleven members ranked it as 3; two members ranked it as 2; and one member ranked it as 1.

The next core competency was "Examiners accurately apply 'considerations for a small organization' as developed by NIST (item number 8) and which appears in Appendix J. The National Institute of Standards and Technology explained that due consideration must be given to the extent to which size may affect some of the answers to the items in the Criteria. For example, a small organization would not have the same leverage capability with suppliers as a large corporation would have. The initial group mean for this item

was 3.10 with a standard deviation of .63. Five panel members ranked this item as 4; thirteen ranked it as 3; and three ranked it as 2.

The next core competency was “Examiners understand common terminology used during training and the examination process that may not appear in the Criteria glossary” (item number 18). This item represents a concrete teaching, which was considered important by the Delphi panel. This item had an initial group mean of 3.00 with a standard deviation of .78. Five panel members ranked this item as 4; twelve members ranked it as 3; three members ranked it as 2; and one member ranked it as 1.

The next core competency was “Examiners learn to prepare for site visits” (item number 23). As mentioned earlier, this is one of three competencies added by the panel dealing with site visits. The initial group mean for this item was 3.00 with a standard deviation of .95.

The next core competency was “Examiners know how to adapt their experience and sector knowledge to the applicant’s sector as they give feedback comments” (item number 3). For example, it can happen that an examiner in the nursing sector could be assigned to an education sector application. Examiners are thus expected to be able to adjust their sector viewpoints in alignment to Baldrige principles. The initial group mean for this item was 2.95 with a standard deviation of .67. Four panel members ranked this item as 4; thirteen members ranked it as 3; and four members ranked it as 2. While there may be skills for this item, it is phrased in an abstract way. Are there ways of teaching examiners

how to adapt their experience and sector knowledge to an applicant's sector that might be considered best practices?

The next core competency was "Examiners learn to include 'so whats' for both strengths and OFI's" (item number 10). Some state organizations require that only OFI's have "so whats." The "so whats" give the significance to the applicant in a constructive way that helps the applicant improve its performance. The initial group mean was 2.95 with a standard deviation of .87. Five panel members ranked this item as 4; twelve members ranked it as 3; two members ranked it as 2; and two members ranked it as 1.

The next core competency was "Examiners need to identify only the scoring band for consensus" (item number 24). This item is similar to items 6 and 7 in the original core competencies. It differs in that it specifies that during their independent review, examiners score only the range, and offer the range at consensus. The initial group mean was 2.81 with a standard deviation of .98. Five panel members ranked this item as 4; ten members ranked it as 3; three members ranked it as 2; and three members ranked it as 1.

The next core competency was "Examiners fully understand the entire award process" (item number 17). While the initial training focuses on the independent review, the panel considered it important for examiners to understand the entire process. This item had an initial group mean of 2.71 with a standard deviation of .64. Two panel members ranked this item as 4; eleven members ranked it as 3; and eight members ranked it as 2.

The next core competency was “Examiners know how to redefine their assessment approach and feedback comments (the learning from training focuses on Award level assessment) to writing comments at other levels of applications (i.e., Level 1 or Level 2 application criteria)” (item number 2). Different states have different numbers of levels of assessments. While examiner training focuses on the award level, the panel considered it important to address other assessment levels in training. This item had an initial group mean of 2.57 with a standard deviation of .98. Four panel members ranked this item as 4; seven members ranked it as 3; seven members ranked it as 2; and three members ranked it as 1. This item was the last of the core competencies in this group which the panel considered important. The panel deemed the two remaining competencies as helpful.

The first of these two helpful core competencies was “Examiners learn to identify best practices” (item number 22). Award winning applicants are expected to be exemplars in their fields and offer best practices for others to emulate. Even though this item represents a teachable skill, it may be the case that some applicants do not have any best practices, particularly those applicants who are just beginning their pursuit of performance excellence. However, best practices, if they exist, are included in the strength key themes. The initial group mean for this item was 2.43 with a standard deviation of .81.

The final core competency in this set was “Examiners get a glimpse of the judging process so that they understand the effect of their work” (item number 21). The judges make the final decision in some states as to which

applicants win the awards for the sectors. Judges are considered to be one of the customers that examiners have with the main customer being the applicants. The initial group mean for this item was 2.10 with a standard deviation of .77. One panel member ranked this item as 4; four members ranked it as 3; twelve members ranked it as 2; and four members ranked it as 1.

The Delphi Panel considered most of the core competencies in this group to be important. Fewer of these were considered essential as compared to the initial core competencies. The standard deviations were typically higher in this set than in the set of original core competencies. It is expected that the panel would find more of the original core competencies essential as those came from the Criteria. One expert commented that examiners grow in knowledge over the years and until then they can rely on their team leaders to help them. With respect to the site visit, one expert commented that site visit issues are addressed later in the process and thus he scored the site visit items low. Many states offer additional site visit training just prior to the site visits.

Round 3. Core Competencies Added by the Delphi Panel: Second Ranking

The core competencies added by the Delphi Panel were repeated in the third round of the survey to give the panel members the opportunity to change their rankings in light of the group mean. Two panel members who participated in Round 2 dropped out so that there were nineteen Delphi Panel members in Round 3. In this third round, the survey reflected each item's group mean from Round 2 as well as the ranking of each item by the panel member to whom the

survey was sent. In observance of confidentiality, no panel member saw another panel member's responses.

By comparing the frequency of responses in Round 3 to that of Round 2, stability was calculated. The seven items which were unstable appeared in Round 4 for a final reevaluation and ranking. Table 4 and Figure 4 show in descending order the means and standard deviations of the core competencies add by the panel and re-ranked in Round 3.

The first of these core competencies was "Examiners abide by the Conflict of Interest and Code of Conduct rules" (item number 9). The final group mean for this item was 4.00 with a standard of .00. This is the only core competency ranked 4 by every panel member. One member who ranked this item as 2 in Round 2 changed the rank to 4 in this round. Another who ranked it as 3 in Round 2 changed the rank to 4 in this round. While this item represents an essential core competency, it may not be one that can be taught. The next core competency was "Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results" (item number 5). This core competency had a Round 3 group mean of 3.95 with a standard deviation of .23. Eighteen panel members ranked this item as 4 and one member ranked it as 3. The very strong clustering around rank 4 with only one member deviating gave this item its high mean and low standard deviation. In Round 2, however, only fifteen of these panel members ranked this item as 4 with the remaining four of these panel members (excluding the two who dropped out) ranking the item

as 3. The differences in frequencies of responses between the two rounds caused this item to be unstable.

The next core competency was “Examiners meet deadlines” (item number 6). This item had a final group mean of 3.89 with a standard deviation of .32. Seventeen panel members ranked this item as 4, and two members ranked it as 3.

The Delphi Panel considered only these first three core competencies essential as their means were all greater than 3.50. The panel considered the next twenty-one core competencies important with means between 2.50 and 3.50.

The first core competency considered important was “Examiners exhibit a sense of commitment to the process” (item number 14). This core competency had a Round 3 group mean of 3.47 with a standard deviation of .51. Nine panel members ranked this item as 4, and ten members ranked it as 3. Due to several changes in rankings from Round 2 to Round 3, this item was unstable at the end of Round 3.

The next core competency was “Examiners are willing to ask for help and receive it” (item number 16). This item had a final group mean of 3.47 with a standard deviation of .51 just as the item preceding it. Thus the frequency distribution was the same for this item as the one preceding it. Unlike the preceding item, this core competency was stable at the end of Round 3.

TABLE 4. Mean and Standard Deviation of Core Competencies Added by the Delphi Panel, Round 3 Results

Core Competencies	Mean Round 3 Results	Standard Deviation Round 3 Results
9. Examiners abide by Conflict of Interest and Code of Conduct rules.	4.00	.00
5. Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results.	3.95	.23
6. Examiners meet deadlines.	3.89	.32
14. Examiners exhibit a sense of commitment to the process.	3.47	.51
16. Examiners are willing to ask for help and receive it.	3.47	.51
11. Examiners understand a process for evaluating the application.	3.42	.51
25. Examiners need to understand the consensus process and how it affects the score.	3.42	.51
7. Examiners consolidate comments to represent the findings and score of the team.	3.37	.60
19. Examiners understand how to complete each step of the examination process.	3.37	.60
26. Examiners must understand the site visit, what it is for, how to ask questions, how to **document** findings, how those findings clarify/verify site visit issues, and how the findings should be the basis for their conclusions to resolve the site visit issues.	3.37	.83
1. Examiners can function effectively as team members.	3.32	.67
4. Examiners know how to give targeted feedback comments that help the applicant move forward on its quality journey but with carefully constructed comments that are not too prescriptive.	3.32	.95
12. Examiners understand the steps in the site visit process including how to identify site visit issues and how to develop site visit worksheets.	3.26	.81
23. Examiners learn to prepare for site visits.	3.21	.86
18. Examiners understand common terminology used during training and the examination process that may not appear in the Criteria glossary.	3.16	.60
13. Examiners leave the training with a sense of confidence in their ability to perform successfully as examiners.	3.11	.46
3. Examiners know how to adapt their experience and sector knowledge to the applicant's sector as they give feedback comments.	3.05	.52
8. Examiners accurately apply "considerations for a small organization" as developed by NIST. (See attached.)	3.00	.47
15. Examiners listen to and learn from other team members.	3.00	.47
20. Examiners understand that the Criteria are complex but not complicated. That is, the Criteria are complex because they consist of several parts, which are linked holistically, but they are not complicated because they can be understood and explained.	3.00	.75
10. Examiners learn to include "so whats" for both strengths and OFI's.	2.89	.74
17. Examiners fully understand the entire award process.	2.68	.58
24. Examiners need to identify only the scoring band for consensus.	2.63	.76
2. Examiners know how to redefine their assessment approach and feedback comments (the learning from training focuses on Award level assessment) to writing comments at other levels of applications (i.e., Level 1 or Level 2 application criteria).	2.53	.96
22. Examiners learn to identify best practices.	2.37	.68
21. Examiners get a glimpse of the judging process so that they understand the effect of their work.	2.11	.57

Ranking: **4: essential; 3: important,** but not essential; **2: helpful,** but not important; **1: unimportant,** should not be included

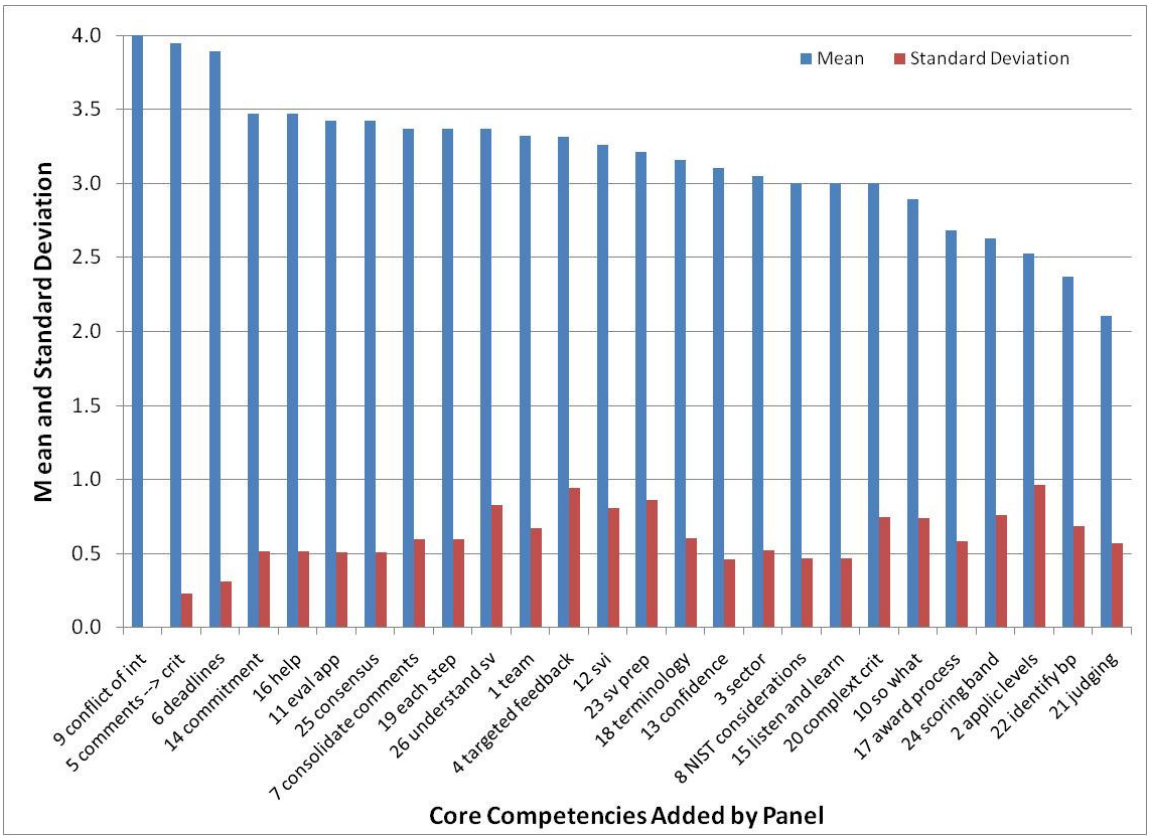

FIGURE 4. Round 3—Mean and standard deviation of core competencies added by panel.

The next core competency was “Examiners understand a process for evaluating the application” (item number 11). This core competency had a final group mean of 3.42 with a standard deviation of .51. Eight panel members ranked this item as 4, and eleven members ranked it as 3.

The next core competency was “Examiners need to understand the consensus process and how it affects the score” (item number 25). This core competency had the same final group mean of 3.42, the same standard deviation of .51, and thus the same frequency distribution as the preceding item.

The next core competency was “Examiners consolidate comments to represent the findings and score of the team” (item number 7). This core competency had a final group mean of 3.37 with a standard deviation of .60. Eight panel members ranked this item as 4; ten members ranked it as 3; and one member ranked it as 2.

The next core competency was “Examiners understand how to complete each step of the examination process” (item number 19). This core competency had the same final group mean of 3.37, the same standard deviation of .60, and thus the same frequency distribution as the preceding item.

The next core competency was “Examiners must understand the site visit, what it is for, how to ask questions, how to document findings, how those finding clarify/verify site visit issues, and how the findings should be the basis for their conclusions to resolve the site visit issues” (item number 26). This core competency had the same final group mean of 3.37 as the preceding two items, but the standard deviation was .83 because of a distribution across all four ranks. Ten panel members ranked this item as 4; seven members ranked it as 3; one member ranked it as 2; and one member ranked it as 1.

The next core competency was “Examiners can function effectively as team members” (item number 1). This core competency had a final group mean of 3.32 with a standard deviation of .67. Eight panel members ranked this item as 4; nine members ranked it as 3; and two members ranked it as 2.

The next core competency was “Examiners know how to give targeted feedback comments that help the applicant move forward on its quality journey

but with carefully constructed comments that are not too prescriptive" (item number 4). This core competency had the same final group mean of 3.32 as the preceding item but with a standard deviation of .95. Ten panel members ranked this item as 4; seven members ranked it as 3; and two members ranked it as 1.

The next core competency was "Examiners understand the steps in the site visit process including how to identify site visit issues and how to develop site visit worksheets" (item number 12). This core competency had a final group mean of 3.26 with a standard deviation of .81. Eight panel members ranked this item as 4; nine members ranked it as 3; one member ranked it as 2; and one member ranked it as 1.

The next core competency was "Examiners learn to prepare for site visits" (item number 23). This core competency had a Round 3 group mean of 3.21 with a standard deviation of .86. Eight panel members ranked this item as 4; eight members ranked it as 3; two members ranked it as 2; and one member ranked it as 1. Because of the changes in rankings from Round 2 to Round 3, this item was unstable at the end of Round 3.

The next core competency was "Examiners understand common terminology used during training and the examination process that may not appear in the Criteria glossary" (item number 18). This core competency had a final group mean of 3.16 with a standard deviation of .60. Five panel members ranked this item as 4; twelve members ranked it as 3; and two members ranked it as 2.

The next core competency was “Examiners leave the training with a sense of confidence in their ability to perform successfully as examiners” (item number 13). This core competency had a Round 3 group mean of 3.11 with a standard deviation of .46. Three panel members ranked this item as 4; fifteen members ranked it as 3; and one member ranked it as 2. Due to changes in the rankings from Round 2 to Round 3, this item was unstable at the end of Round 3.

The next core competency was “Examiners know how to adapt their experience and sector knowledge to the applicant’s sector as they give feedback comments” (item number 3). This core competency had a final group mean of 3.05 with a standard deviation of .52. Three panel members ranked this item as 4; fourteen members ranked it as 3; and two members ranked it as 2.

The next core competency was “Examiners accurately apply ‘considerations for a small organization’ as developed by NIST” (item number 8). This core competency had a final group mean of 3.00 with a standard deviation of .47. Two panel members ranked this item as 4; fifteen members ranked it as 3; and two members ranked it as 2.

The next core competency was “Examiners listen to and learn from other team members” (item number 15). This item was identical to the preceding item in terms of final group mean of 3.00, standard deviation of .47, and frequency distribution.

The next core competency was “Examiners understand that the Criteria are complex but not complicated. That is, the Criteria are complex because they

consist of several parts, which are linked holistically, but they are not complicated because they can be understood and explained" (item number 20). This core competency also had a final group mean of 3.00 but the standard deviation was .75. Four panel members ranked this item as 4; twelve members ranked it as 3; two members ranked it as 2; and one member ranked it as 1.

The next core competency was "Examiners learn to include 'so whats' for both strengths and OFI's" (item number 10). This core competency had a Round 3 group mean of 2.89 with a standard deviation of .74. Three panel members ranked this item as 4; twelve members ranked it as 3; three members ranked it as 2; and one member ranked it as 1. Due to several changes in rankings from Round 2 to Round 3, this item was unstable at the end of Round 3.

The next core competency was "Examiners fully understand the entire award process" (item number 17). This core competency had a final group mean of 2.68 with a standard deviation of .58. One panel member ranked this item as 4; eleven members ranked it as 3; and seven members ranked it as 2.

The next core competency was "Examiners need to identify only the scoring band for consensus" (item number 24). This core competency had a Round 3 group mean of 2.63 with a standard deviation of .76. One panel member ranked this item as 4; twelve members ranked it as 3; four members ranked it as 2; and two members ranked it as 1. Due to several changes in rankings from the prior round, this item was unstable at the end of Round 3.

The next core competency was "Examiners know how to redefine their assessment approach and feedback comments (the learning from training

focuses on Award level assessment) to writing comments at other levels of application (i.e., Level 1 or Level 2 application criteria)" (item number 2). This core competency had a final group mean of 2.53 with a standard deviation of .96. Three panel members ranked this item as 4; seven members ranked it as 3; six members ranked it as 2; and three members ranked it as 1.

This item was the last of the twenty-one core competencies which the Delphi Panel considered important. The last two core competencies in this group the panel deemed helpful.

The first of these last two core competencies was "Examiners learn to identify best practices" (item number 22). The final group mean for this item was 2.37 with a standard deviation of .68. No one gave this item a rank of 4; nine panel members ranked it as 3; eight members ranked it as 2; and two members ranked it as 1.

The final core competency in this round added by the Delphi Panel was "Examiners get a glimpse of the judging process so that they understand the effect of their work" (item number 21). The Round 3 group mean for this core competency was 2.11 with a standard deviation of .57. Four panel members ranked this item as 3; thirteen members ranked it as 2; and two members ranked it as 1. Due to several changes in rankings from the prior round, this item was unstable at the end of Round 3.

One expert commented that it is hard to distinguish what is truly essential as she was deciding how to rank each item. Different states may place different weights on what is important for examiners to know to effectively evaluate and

score applications. At the lower end of the group means were the two core competencies which were added by the panel and were considered helpful but important in both Rounds 2 and 3. These two core competencies were "Examiners learn to identify best practices" (item number 22); and "Examiners get a glimpse of the judging process so that they understand the effect of their work" (number 21).

As the survey focused on the initial training, in instances where states may have subsequent training either pre-consensus and/or pre-site visit, comments indicated that the rankings were lower in these instances. Nonetheless, the panel considered these core competencies to be important.

Round 4. Core Competencies Added by the Delphi Panel: Final Ranking

There were seven core competencies added by the Delphi Panel which appeared for initial ranking in Round 2, but which were unstable at the end of Round 3. These items were once again submitted to the panel of experts in Round 4 for re-ranking. At the end of Round 4, the final round of the survey, only one of these items remained unstable. Eighteen experts participated in this final round of the survey. Table 5 and Figure 5 show the final group means in descending order and standard deviations for these seven core competencies.

TABLE 5. Core Competencies Added by the Delphi Panel, Round 4 Results

Core Competencies	Mean Round 4 Results	Standard Deviation Round 4 Results
1. Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results.	3.94	.24
4. Examiners exhibit a sense of commitment to the process.	3.56	.51
3. Examiners leave the training with a sense of confidence in their ability to perform successfully as examiners.	3.11	.47
6. Examiners learn to prepare for site visits.	3.11	.76
2. Examiners learn to include "so whats" for both strengths and OFI's.	3.00	.69
7. Examiners need to identify only the scoring band for consensus.	2.56	.86
5. Examiners get a glimpse of the judging process so that they understand the effect of their work.	2.11	.47

Ranking: **4: essential; 3: important,** but not essential; **2: helpful,** but not important; **1: unimportant,** should not be included

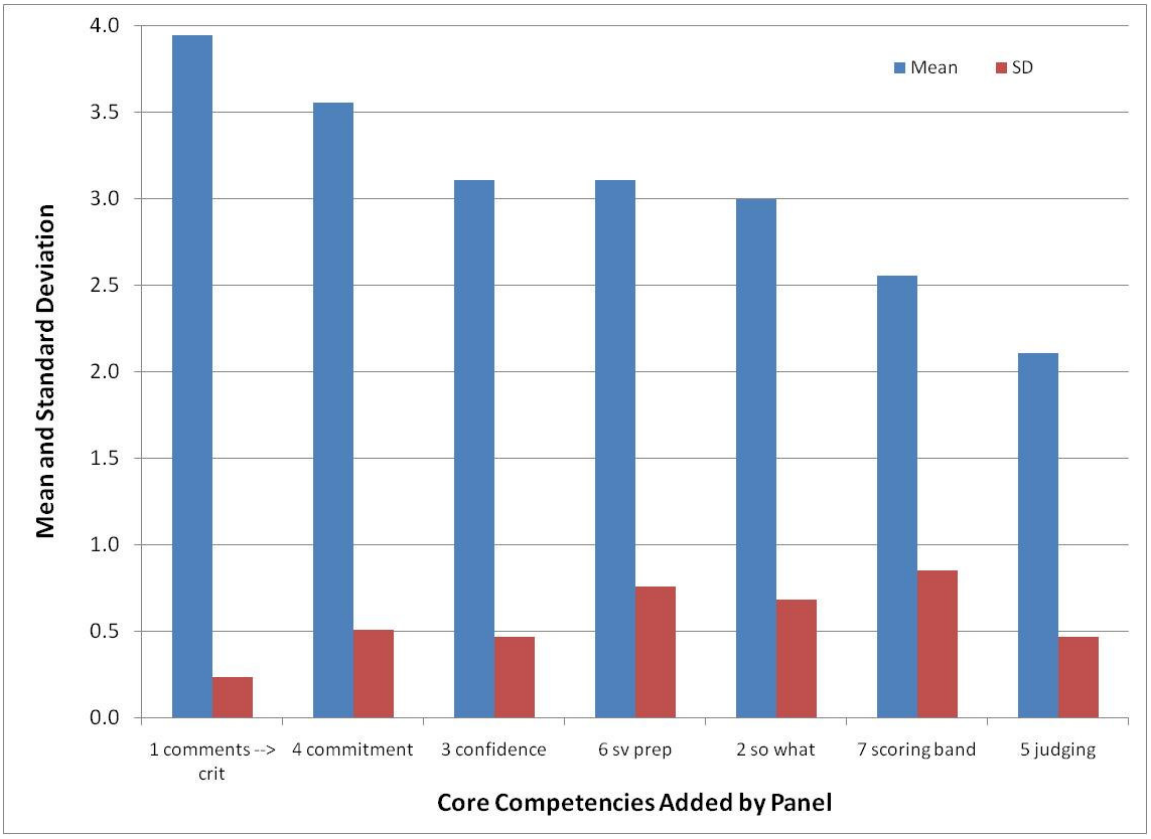

FIGURE 5. Round 4—Mean and standard deviation of core competencies added by panel.

The first of these core competencies was “Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results” (item number 1). The final group mean for this item was 3.94 with a standard deviation of .24. The standard deviation was quite low because seventeen panel members ranked this item as 4 with only one member ranking it as 3. This item achieved stability.

The next core competency was “Examiners exhibit a sense of commitment to the process” (item number 4). This item had a final group mean of 3.56 with a standard deviation of .51. Ten panel members ranked this item as 4, and eight panel members ranked it as 3. This item achieved stability.

The next core competency was “Examiners leave the training with a sense of confidence in their ability to perform successfully as examiners” (item number 3). The final group mean for this item was 3.11 with a standard deviation of .47. Three panel members ranked this item as 4; fourteen members ranked it as 3; and one member ranked it as 2. This item achieved stability.

The next core competency was “Examiners learn to prepare for site visits” (item number 6). This item also had a final group mean of 3.11 but the standard deviation was .76. Five panel members ranked this item as 4; eleven members ranked it as 3; one member ranked it as 2; and one member ranked it as 1. Due to several changes in rankings from the prior round this item remained unstable.

The next core competency was “Examiners learn to include ‘so whats’ for both strengths and OFI’s” (item number 2). This item had a final group mean of

3.00 with a standard deviation of .69. Three panel members ranked this item as 4; thirteen members ranked it as 3; one member ranked it as 2; and one member ranked it as 1. This item achieved stability.

The next core competency was “Examiners need to identify only the scoring band for consensus” (item number 7). This item had a final group mean of 2.56 with a standard deviation of .86. One panel member ranked this item as 4; eleven members ranked it as 3; three members ranked it as 2; and three members ranked it as 1. This item achieved stability.

The last core competency in this set was “Examiners get a glimpse of the judging process so that they understand the effect of their work” (item number 5). This item had a final group mean of 2.11 with a standard deviation of .47. Three panel members ranked this item as 3; fourteen members ranked it as 2; and one member ranked it as 1. This item achieved stability.

The one core competency which the panel deemed essential in this round was also considered essential in Round 3. Similarly, the core competencies which the panel deemed important in this round were also considered important in Round 3. The last core competency in this final round was the only one which the panel deemed helpful as they had also determined in Round 3.

Summary of Findings for the Added Core Competencies – Research Question 1

In summary, all of the core competencies identified from the Baldrige Criteria which appeared in the original set of core competencies were found to be essential or important with a balance between those considered essential

and those considered important. The only core competency considered helpful from the original core competencies was “Examiners learn how to assign an exact numeric score” (number 7). There were few core competencies added by the panel which were considered essential. Most of the added core competencies were considered important with two considered helpful. These two core competencies were “Examiners learn to identify best practices” (item number 22); and “Examiners get a glimpse of the judging process so that they understand the effect of their work” (number 21).

Research Question Two

The second research question asks, “What are the best practices in examiner training programs provided by state Baldrige organizations?” A best practice is defined as an effective technique for training examiners. It answers the question ‘how’ and describes a process.

The best practices submitted to the Delphi Panel in Round 1 for ranking were based on selected state Baldrige training programs. Panelists were invited to contribute to the initial list. Their contributions were included in subsequent rounds. The numbering of the best practices in the tables is the same as it appeared in the surveys which the panelists completed. This preserves the original order. However, the best practices are displayed in the tables according to descending means.

Round 1. The Original Best Practices: Initial Ranking

Table 6 and Figure 6 show the originally identified best practices, and the mean and standard deviation for the Round 1 results of those best practices. Twenty-two panelists participated in this first round. The highest ranked best practice was “Examiners work in teams to review and improve item comments” (item number 6). The Round 1 group mean for this item was 3.50 with a standard deviation of .80. Fourteen panelists ranked this item as 4; six panelists ranked it as 3; one panelist ranked it as 2; and one panelist ranked it as 1. This best practice was the only one in this set which the Delphi Panel deemed consensually essential.

The next best practice was “Examiners learn by using a case study in training” (item number 2). The Round 1 group mean was 3.00 with a standard deviation of 1.07. Nine panelists ranked this item as 4; seven panelists ranked it as 3; three panelists ranked it as 2; and three panelists ranked it as 1. The disparity in rankings caused the standard deviation to be greater than 1.00. The panel considered this best practice important.

TABLE 6. Mean and Standard Deviation of Original Best Practices, Round 1 Results

Best Practices	Mean Round 1 Results	Standard Deviation Round 1 Results
6. Examiners work in teams to review and improve item comments.	3.50	.80
2. Examiners learn by using a case study in training.	3.00	1.07
3. Instructors comprehensively present the Criteria Manual.	2.68	.95
1. Examiners complete a pre-work case study.	2.64	1.14
4. Examiners place their comments on the wall for review by other examiners (Walking the Wall).	2.50	1.01
5. New and returning examiners are separated for more specific coaching during the training program.	2.36	1.09

Ranking: **4: essential; 3: important,** but not essential; **2: helpful,** but not important; **1: unimportant,** should not be included

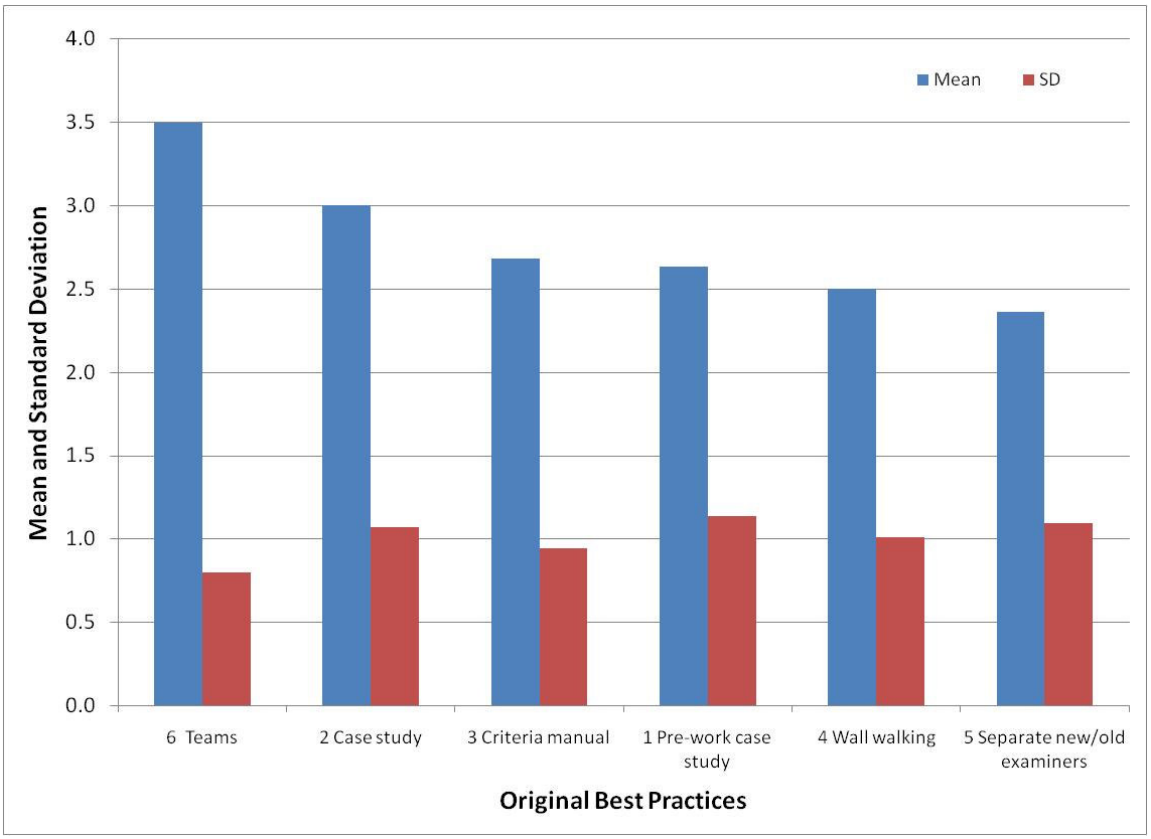

FIGURE 6. Round 1—Mean and standard deviation of original best practices.

Some state Baldrige organizations have eliminated the case study in their training programs. The case study is a fifty-page application which simulates an

actual application. One panelist commented that he was initially skeptical of eliminating the case study. After coaching a team comprised mainly of new examiners without using a case study, this panelist was convinced that the case study could be eliminated because the feedback report which the team produced was excellent. Moreover, one comment from a panelist explained that a former Baldrige judge involved in another state program confirmed that the quality of feedback reports from teams not trained with case studies rivaled national Baldrige feedback reports. Another panelist suggested using the real application during training. This requires that the actual team work together during training.

The next best practice was “Instructors comprehensively present the Criteria manual” (item number 3). The Round 1 group mean for this item was 2.68 with a standard deviation of .95. Five panelists ranked this item as 4; seven panelists ranked it as 3; eight panelists ranked it as 2; and two panelists ranked it as 1. Even though the Criteria Manual serves as the foundation for the Baldrige process, the Delphi Panel considered a comprehensive presentation of it as important rather than essential.

The next best practice was “Examiners complete a pre-work case study” (item number 1). This item is very similar to item number 2. Some state organizations require examiners to prepare an evaluation of a case study before attending training. The evaluation of the case study is then discussed during training. The Round 1 group mean for this item was 2.64 with a standard deviation of 1.14. Six panelists ranked this item as 4; seven panelists ranked it

as 3; four panelists ranked it as 2; and five panelists ranked it as 1. The panel considered this item important.

The next best practice was “Examiners place their comments on the wall for review by other examiners (Walking the Wall)” (item number 4). In some state organizations examiners post comments for each item on flip chart paper and tape the paper to the wall. Examiners walk around the room reading the comments and writing additional notes about the comments. This procedure may occur at consensus in states where examiners meet in person. In other states this process may occur at site visit. In any case, this procedure does not occur in the independent review; however, trainers may use this procedure during the initial training so that examiners have an example of the process. The Round 1 group mean for this best practice was 2.50 with a standard deviation of 1.01. Four panelists ranked this item as 4; seven panelists ranked it as 3; seven panelists ranked it as 2; and four panelists ranked it as 1. The panel considered this best practice important.

The final best practice in this round was “New and returning examiners are separated for more specific coaching during the training program” (item number 5). This best practice reflects a practice that is specific to one or only a few state organizations whereas some of the other best practices are more common. This item had a Round 1 group mean of 2.36 with a standard deviation of 1.09. Thirteen panelists ranked it as 4; six panelists ranked it as 3; one panelist ranked it as 2; and two panelists ranked it as 1. This item was considered helpful but not important.

The standard deviations for this set of best practices were typically higher than the standard deviations for the core competencies. This result is not surprising. Many of the core competencies were derived from the Criteria. The best practices reflect the various state training programs. The number and timing of training programs vary from state to state. Hence, in the next round in which best practices suggested by the panel were added, there will likely continue to be variation.

Round 2. The Original Best Practices: Second Ranking

Table 7 and Figure 7 show the mean and standard deviation for the second ranking or the **original** best practices. Twenty-one experts participated in this round of the survey. All of these best practices achieved stability in this round. The highest ranked best practice was “Examiners work in teams to review and improve item comments” (item number 6). This item had a final group mean of 3.38 with a standard deviation of .86. Thirteen panelists ranked this item as 4; six panelists ranked it as 3; and two panelists ranked it as 2. The panel deemed this item important in this round while in Round 1 they deemed it essential. However, the difference between the means from the two rounds is much less than the lower of the two standard deviations. Hence the two means can be considered indistinguishable. If the ranking of the participant who dropped out after Round 1 is ignored, then the difference in rankings between the two rounds is that in Round 1 one panelist ranked the item as 2 and one ranked it as 1; whereas in Round 2 two panelists ranked it as 2.

TABLE 7. Mean and Standard Deviation of Original Best Practices, Round 2 Results

Best Practices	Mean Round 2 Results	Standard Deviation Round 2 Results
6. Examiners work in teams to review and improve item comments.	3.38	.86
2. Examiners learn by using a case study in training.	3.00	1.00
3. Instructors comprehensively present the Criteria Manual.	2.67	.91
1. Examiners complete a pre-work case study.	2.67	1.11
4. Examiners place their comments on the wall for review by other examiners (Walking the Wall).	2.57	.98
5. New and returning examiners are separated for more specific coaching during the training program.	2.29	.96

Ranking: **4: essential; 3: important,** but not essential; **2: helpful,** but not important; **1: unimportant,** should not be included

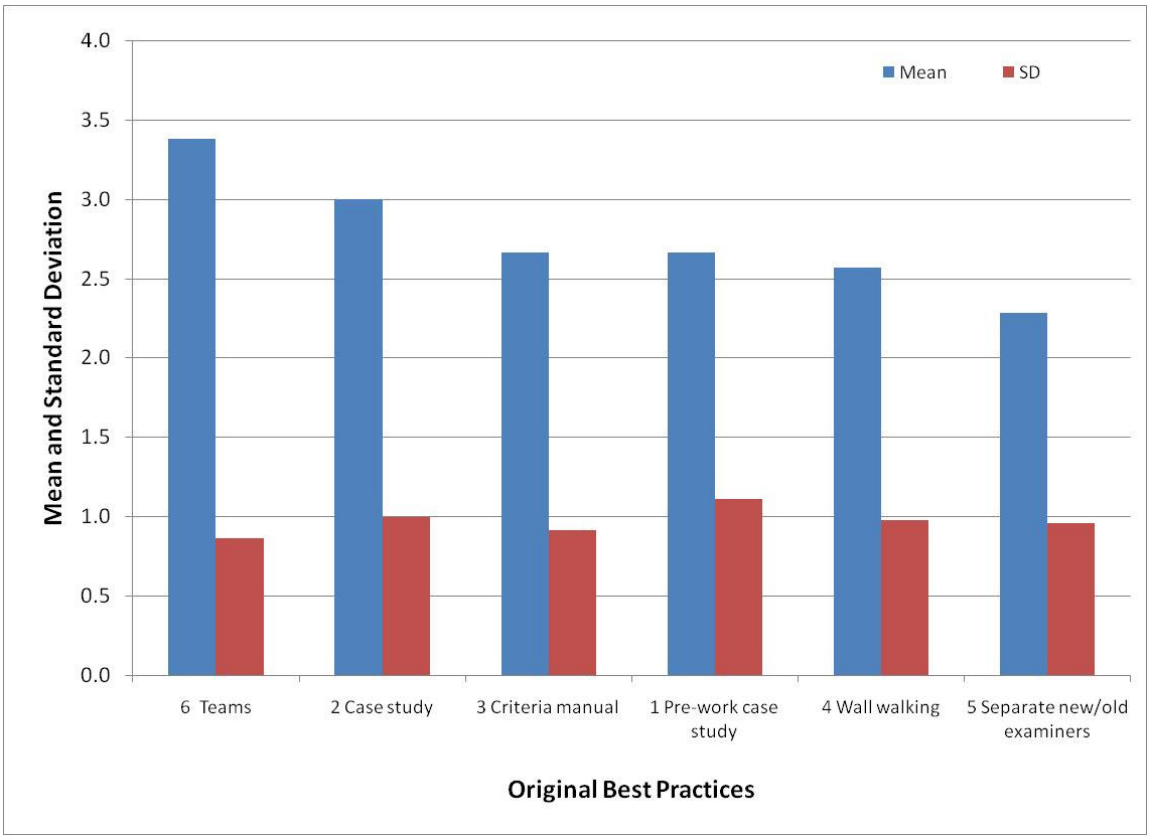

FIGURE 7. Round 2—Mean and standard deviation of original best practices.

The next best practice was “Examiners learn by using a case study in training” (item number 2). The final group mean for this item was 3.00 with a standard deviation of 1.00. Eight panelists ranked this item as 4; seven panelists ranked it as 3; four panelists ranked it as 2; and two panelists ranked it as 1. The panel considered this item important.

The next best practice was “Instructors comprehensively present the Criteria manual” (item number 3). This item had a final group mean of 2.67 with a standard deviation of .91. Four panelists ranked this item as 4; eight panelists ranked it as 3; seven panelists ranked it as 2; and two panelists ranked it as 1. The panel considered this item important.

The next best practice was “Examiners complete a pre-work case study” (item number 1). This item also had a final group mean of 2.67, but the standard deviation was 1.11. Six panelists ranked this item as 4; six panelists ranked it as 3; five panelists ranked it as 2; and four panelists ranked it as 1. The panel considered this item important.

The next best practice was “Examiners place their comments on the wall for review by other examiners (Walking the Wall)” (item number 4). This item had a final group mean of 2.57 with a standard deviation of .98. Three panelists ranked this item as 4; seven panelists ranked it as 3; seven panelists ranked it as 2; and four panelists ranked it as 1. The panel considered this item important.

The last best practice in this set was “New and returning examiners are separated for more specific coaching during the training program” (item number 5). This item had a final group mean of 2.29 with a standard deviation of .96.

Two panelists ranked this item as 4; seven panelists ranked it as 3; seven panelists ranked it as 2; and five panelists ranked it as 1. This is the only item in this set which the panel deemed helpful instead of important. There was little difference in the results from Rounds 1 and 2. The order of the items remained the same and the means and standard deviations were similar.

In summary of the original best practices, they, like the original core competencies reached consensus by the end of Round 2. None of these best practices was deemed essential. All but one was considered important, and one was considered helpful but not important. The highest ranked best practice focuses on teamwork to improve comments. Using a case study during training was considered more important than using a case study for pre-work. The only competency deemed helpful instead of important suggests separating new and returning examiners during training.

Round 2. Best Practices Added by the Delphi Panel: Initial Ranking

Table 8 and Figure 8 show the best practices **added** by the Delphi Panel along with the mean and standard deviation for the panel's initial ranking. Twenty-one participants ranked this set of best practices.

TABLE 8. Mean and Standard Deviation of Best Practices Added by the Delphi Panel, Round 2 Results

Best Practices	Mean Round 2 Results	Standard Deviation Round 2 Results
19. Each step of the examination process is well defined in sequential order.	3.43	.87
13. Examiners experience the various tasks required in the various phases of the application process.	3.20	.77
11. Examiners learn good/bad examples of comments and key themes; they must evaluate these against the Criteria for effective comments.	3.14	.73
8. Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a Process and a Results Item.	3.10	.94
1. Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.	3.00	.71
15. Examiners participate in an exercise in which each examiner synthesizes the comments of four other examiners and prepares a draft set of comments.	3.00	.84
9. New examiners receive training with their pre-workshop assignment; they walk through the assignment, practice and complete one Process and Results Item.	2.90	.89
16. Examiners participate in an exercise in which they formulate site visit issues and interview questions using the applicant's terms.	2.90	.89
20. Trainers develop and deliver the entire training program for consistency.	2.90	1.14
5. New examiners participate in Virtual Orientations for New Examiners to guide them in the pre-work process.	2.67	.80
17. Examiners are put in triads each day where experienced examiners coach new examiners.	2.62	.97
12. Examiners learn to use an evaluation worksheet as a way to organize and standardize individual review of an application.	2.57	.75
18. Examiners work on real applications, and use the case study only as an example of how everything works together and provides examples of well written comments and key themes.	2.52	.98
3. Examiners use a web-based "Examiner Depot" method to share their work during training as well as all assessment stages.	2.48	.93
7. Examiners are matched with their team during training.	2.38	.67
10. Pre-workshop individual review of application does not require scoring as scoring is taught in the initial training workshop.	2.38	.74
2. Examiners train with their actual team using the real application to learn how to be an examiner instead of a case study document. This means examiner teams assigned to an application learn and work together on the actual application.	2.33	.97
14. Examiner training occurs at different times in the year as applicants apply throughout the year.	2.14	1.15
6. Examiners work on their pre-work together with a trainer in Pre-work Labs in computer rooms.	2.10	.77
4. Examiners participate in Virtual Examiner Trainings.	2.05	.74

Ranking: **4: essential; 3: important,** but not essential; **2: helpful,** but not important; **1: unimportant,** should not be included

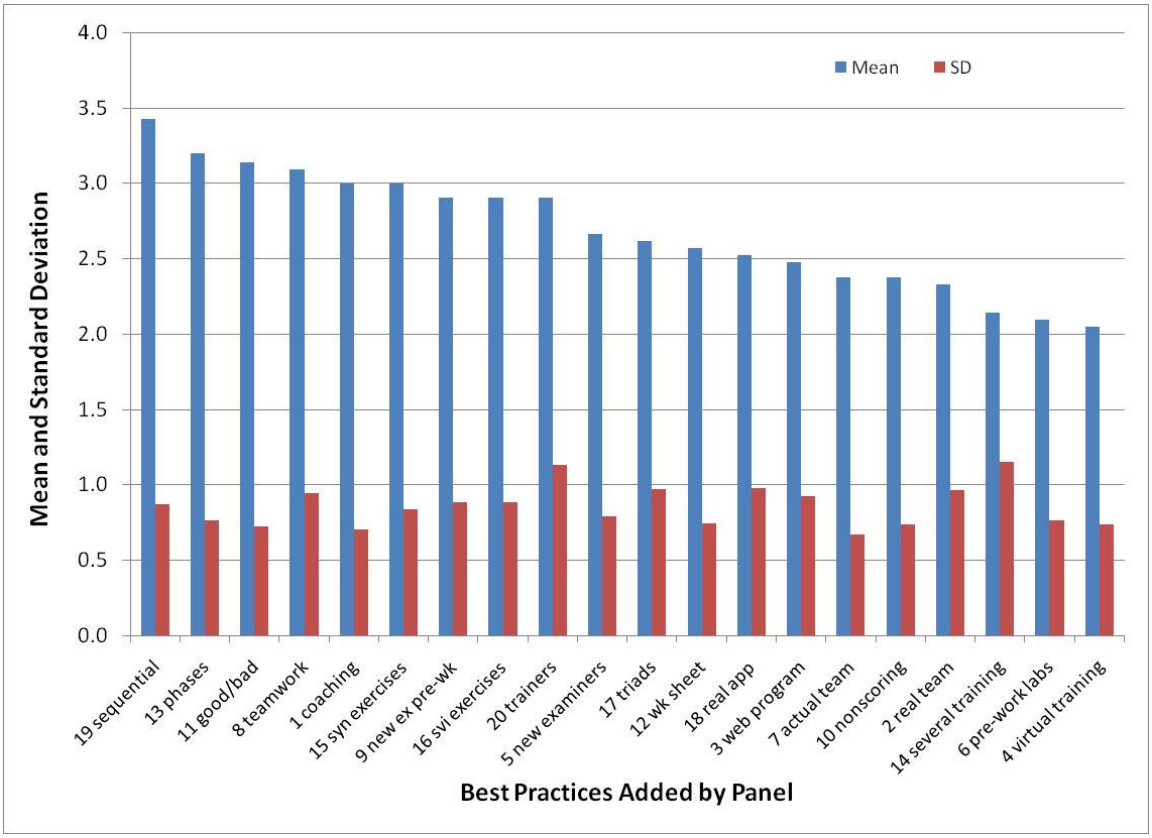

FIGURE 8. Round 2—Mean and standard deviation of best practices added by panel.

The highest ranked best practice was “Each step of the examination process is well-defined in sequential order” (item number 19). The Round 2 group mean for this item was 3.43 with a standard deviation of .87. Thirteen panelists ranked this item as 4; five panelists ranked it as 3; two panelists ranked it as 2; and one panelist ranked it as 1. The Delphi Panel deemed this item important.

The next best practice was “Examiners experience the various tasks required in the various phases of the application process” (item number 13). This item refers to the importance of introducing tasks into the initial training which examiners will use beyond the independent review. This item had a Round 2

group mean of 3.20 with a standard deviation of .77. Eight panelists ranked this item as 4; nine panelists ranked it as 3; and four panelists ranked it as 2. The Delphi Panel deemed this item important.

The next best practice was “Examiners learn good/bad examples of comments and key themes; they must evaluate these against the Criteria for effective comments” (item number 11). This item had a Round 2 group mean of 3.14 with a standard deviation of .73. Seven panelists ranked this item as 4; ten panelists ranked it as 3; and four panelists ranked it as 2. One panelist commented that the examples of good/bad comments need to be challenging to be helpful. The Delphi Panel deemed this item important.

The next best practice was “Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a Process and a Results item” (item number 8). This item offers a best practice to complement the core competencies which stress the importance of team work. This item had a Round 2 group mean of 3.10 with a standard deviation of .94. Eight panelists ranked this item as 4; nine panelists ranked it as 3; two panelists ranked it as 2; and two panelists ranked it as 1. The Delphi Panel deemed this item important.

The next best practice was “Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process” (item number 1). This item had a Round 2 group mean of 3.00 with a standard deviation of .71. Five panelists ranked this item as 4; eleven panelists

ranked it as 3; and five panelists ranked it as 2. The Delphi Panel deemed this item important.

The next best practice was “Examiners participate in an exercise in which each examiner synthesizes the comments of four other examiners and prepares a draft set of comments” (item number 15). This exercise prepares examiners for the consensus meeting which occurs after the independent review. This item had a Round 2 group mean of 3.00 with a standard deviation of .84. Six panelists ranked this item as 4; ten panelists ranked it as 3; four panelists ranked it as 2; and one panelist ranked it as 1.The Delphi Panel deemed this item important.

The next best practice was “New examiners receive training with their pre-workshop assignment; they walk through the assignment, practice and complete one Process and Results Item” (item number 9). Many state Baldrige organizations use a case study for the pre-workshop assignment. This best practice would need to occur in a separate training session for new examiners prior to the general examiner training. The Round 2 group mean for this item was 2.90 with a standard deviation of .89. Six panelists ranked this item as 4; eight panelists ranked it as 3; six panelists ranked it as 2; and one panelist ranked it as 1. The Delphi Panel deemed this item important.

The next best practice was “Examiners participate in an exercise in which they formulate site visit issues and interview questions using the applicant’s terms” (item number 16). This item refers to the site visit, which is the last phase of the evaluation process. Even during the initial training it is suggested that the

site visit be addressed. This item offers a best practice for the core competencies related to the site visit. Yet one expert commented that this item is irrelevant in the initial training. This item had a Round 2 group mean of 2.90 with a standard deviation of .89 just as the previous item. The frequency distribution for this item was therefore the same as for the previous item. The Delphi Panel deemed this item important.

The next best practice was “Trainers develop and deliver the entire training program for consistency” (item number 20). This item had a Round 2 group mean of 2.90 as did the previous two items. However, the standard deviation was 1.14 for this item. Eight panelists ranked this item as 4; seven panelists ranked it as 3; two panelists ranked it as 2; and four panelists ranked it as 1. The Delphi Panel deemed this item important.

The next best practice was “New Examiners participate in Virtual Orientations for New Examiners to guide them in the pre-work process” (item number 5). This item focuses only on new examiners by offering a tool to help them complete the assignment due at the training prior to the individual review. This item had a Round 2 group mean of 2.65 with a standard deviation of .80. Three panelists ranked this item as 4; nine panelists ranked it as 3; eight panelists ranked it as 2; and one panelist ranked it as 1. The Delphi Panel deemed this item important.

The next best practice was “Examiners are put in triads each day where experienced examiners coach new examiners” (item number 17). This item focuses on having training teams comprised of a combination of new and

experienced examiners. The Round 2 group mean for this item was 2.62 with a standard deviation of .97. Three panelists ranked this item as 4; eleven panelists ranked it as 3; three panelists ranked it as 2; and four panelists ranked it as 1.

The next best practice was “Examiners learn to use an evaluation worksheet as a way to organize and standardize individual review of an application” (item number 12). The Round 2 group mean for this item was 2.57 with a standard deviation of .75. Two panelists ranked this item as 4; nine panelists ranked it as 3; nine panelists ranked it as 2; and one panelist ranked it as 1.

The next best practice was “Examiners work on real applications, and use the case study only as an example of how everything works together and provides examples of well-written comments and key themes” (item number 18). This practice would require that examiners work in their actual teams during training. While possibly reducing some of the workload involved in the independent review, it introduces consensus practices prior to the independent review. This item had a Round 2 group mean of 2.52 with a standard deviation of .98. Four panelists ranked this item as 4; six panelists ranked it as 3; eight panelists ranked it as 2; and three panelists ranked it as 1. The Delphi Panel deemed this item important.

The Delphi Panel considered all of the above suggested best practices as important. There were no best practices considered essential by the panel. The remaining seven suggested best practices the panel deemed helpful but not important.

The highest ranked helpful suggested best practice was “Examiners use a web-based ‘Examiner Depot’ method to share their work during training as well as all assessment stages” (item number 3). The “Examiner Depot” is a tool that allows examiners to upload their evaluations. When this is used during the independent evaluation as indicated by this suggested best practice, the examiners are likely to be influenced by the comments of other examiners on their team so that the independent review may begin to resemble the consensus evaluation. The Round 2 group mean for this item was 2.48 with a standard deviation of .93. Three panelists ranked this item as 4; seven panelists ranked it as 3; eight panelists ranked it as 2; and three panelists ranked it as 1.

The next best practice considered helpful was “Examiners are matched with their team during training” (item number 7). This best practice is interesting because some of the other best practices depend on it. For example, in order for examiners to work on actual applications they must work with their teams. This item had a Round 2 group mean of 2.38 with a standard deviation of .67. One panelist ranked this item as 4; seven panelists ranked it as 3; twelve panelists ranked it as 2; and one panelist ranked it as 1.

The next best practice considered helpful was “Pre-workshop individual review of application does not require scoring as scoring is taught in the initial training workshop” (item number 10). States which require examiners to complete an evaluation of a case study may require examiners not only to write comments and key themes but also to score the case study. This best practice suggests the elimination of the scoring component of the pre-work. One panelist

commented that examiners need the experience of attempting to score so that during the training session they will be aware of how much they understand about scoring. This item had a Round 2 group mean of 2.38 like the previous item; however, the standard deviation for this item was .74. One panelist ranked this item as 4; eight panelists ranked it as 3; ten panelists ranked it as 2; and two panelists ranked it as 2.

The next best practice considered helpful was “Examiners train with their actual team using the real application instead of a case study to learn how to be an examiner. This means examiner teams assigned to an application learn and work together on the actual application” (item number 2). This item combines items 7 and 18 and was ranked lower than either. One panelist who gave this item a low ranking commented that maintaining anonymity of applications would be difficult. The Round 2 group mean for this item was 2.33 with a standard deviation of .97. Three panelists ranked this item as 4; five panelists ranked it as 3; nine panelists ranked it as 2; and four panelists ranked it as 1.

The next best practice considered helpful was “Examiner training occurs at different times in the year as applicants apply throughout the year” (item number 14). Only a few states have revolving applications. Many states have one deadline for all applications. The limited practice of revolving applications from organizations may have contributed to its low ranking as the majority of the Delphi Panel members have no experience with this practice. The Round 2 group mean for this item was 2.14 with a standard deviation of 1.15. Four

panelists ranked this item as 4; four panelists ranked it as 3; five panelists ranked it as 2; and eight panelists ranked it as 1.

The next best practice considered helpful was “Examiners work on their pre-work together with a trainer in Pre-work Labs in computer rooms” (item number 6). Generally the pre-work is an independent homework assignment due at the beginning of the training session, which serves to emulate the independent review process. Some states offer an extra training session for new examiners so that they will know how to complete the pre-work assignment. Some states offer electronic guides to completing the pre-work either as the only training for new examiners or as a complement to a new examiner training session. The Round 2 group mean for this item was 2.10 with a standard deviation of .77. Seven panelists ranked this item as 3; nine panelists ranked it as 2; and five panelists ranked it as 1.

The final best practice in this set and which was considered helpful was “Examiners participate in Virtual Examiner Trainings” (item number 4). This item resembles the previous item. State Baldrige organizations are incorporating additional electronic tools into the evaluation process every year. Some state Baldrige organizations may use electronic training to augment the training workshops. One panelist commented that examiners would require in-depth training on this because of the varying levels of computer savvy. The Round 2 group mean for this item was 2.05 with a standard deviation of .74. One panelist ranked this item as 4; three panelists ranked it as 3; thirteen panelists ranked it as 2; and four panelists ranked it as 1.

This is the only data set examined so far in which no items were deemed essential. This set also had the largest number of items considered only helpful. These items, much more than the core competencies, reflect individual state Baldrige training programs. As such the use of these best practices is not widespread nor universally known throughout all participating organizations and thus the group means reflected the limited use of individual state Baldrige organization best practices.

Round 3. Best Practices Added by the Delphi Panel: Second Ranking

Table 9 and Figure 9 show the mean and standard deviation for the second ranking of the best practices added by the Delphi Panel. Nineteen panel members participated in this round. The stability of each item was calculated. The nine items that remained unstable in this round, Round 3, were submitted to the panel for a third and final ranking in the next round, Round 4.

As in the previous round, the highest ranked best practice was “Each step of the examination process is well-defined in sequential order” (item number 19). This item had a Round 3 group mean of 3.42 with a standard deviation of .77. Ten panelists ranked this item as 4; eight panelists ranked it as 3; and one panelist ranked it as 1. The Delphi Panel deemed this best practice important. Several changes in ranking from the initial ranking caused this item to be unstable.

TABLE 9. Mean and Standard Deviation of Best Practices Added by the Delphi Panel, Round 3 Results

Best Practices	Mean Round 3 Results	Standard Deviation Round 3 Results
19. Each step of the examination process is well- defined in sequential order.	3.42	.77
8. Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a Process and a Results Item.	3.21	.63
11. Examiners learn good/bad examples of comments and key themes; they must evaluate these against the Criteria for effective comments.	3.16	.69
13. Examiners experience the various tasks required in the various phases of the application process.	3.11	.66
9. New examiners receive training with their pre-workshop assignment; they walk through the assignment, practice and complete one Process and Results Item.	3.00	.67
1. Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.	3.00	.75
15. Examiners participate in an exercise in which each examiner synthesizes the comments of four other examiners and prepares a draft set comments.	2.95	.85
16. Examiners participate in an exercise in which they formulate site visit issues and interview questions using the applicant's terms.	2.84	.83
20. Trainers develop and deliver the entire training program for consistency.	2.84	1.01
17. Examiners are put in triads each day where experienced examiners coach new examiners.	2.63	.68
3. Examiners use a web-based "Examiner Depot" method to share their work during training as well as all assessment stages.	2.63	.83
18. Examiners work on real applications, and use the case study only as an example of how everything works together and provides examples of well-written comments and key themes.	2.63	.90
5. New examiners participate in Virtual Orientations for New Examiners to guide them in the pre-work process.	2.58	.69
12. Examiners learn to use an evaluation worksheet as a way to organize and standardize individual review of an application.	2.53	.70
10. Pre-workshop individual review of application does not require scoring as scoring is taught in the initial training workshop.	2.32	.67
4. Examiners participate in Virtual Examiner Trainings.	2.21	.63
2. Examiners train with their actual team using the real application to learn how to be an examiner instead of a case study document. This means examiner teams assigned to an application learn and work together on the actual application.	2.21	1.03
7. Examiners are matched with their team during training.	2.16	.69
14. Examiner training occurs at different times in the year as applicants apply throughout the year.	2.11	.99
6. Examiners work on their pre-work together with a trainer in Pre-work Labs in computer rooms.	1.95	.78

Ranking: **4: essential; 3: important,** but not essential; **2: helpful,** but not important; **1: unimportant,** should not be included

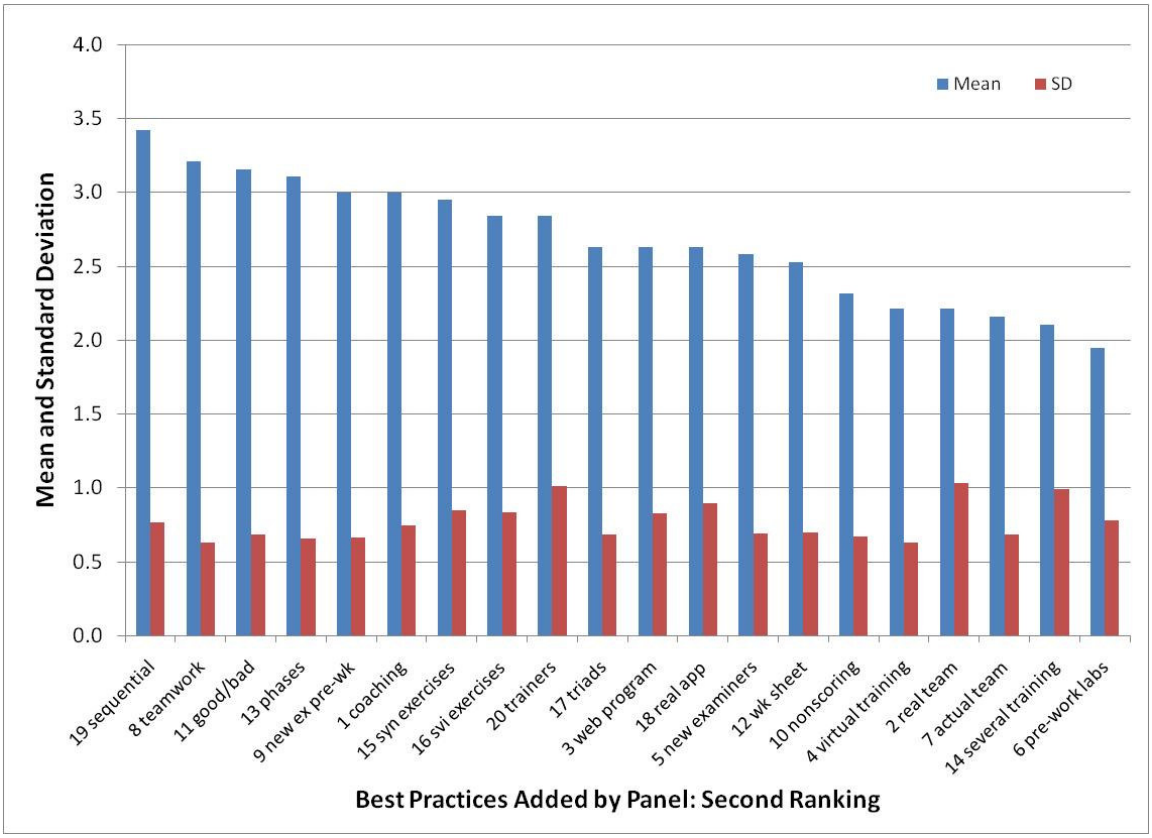

FIGURE 9. Round 3—Mean and standard deviation of best practices added by panel: second ranking.

The next best practice was “Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a Process and a Results item” (item number 8). This item had a final group mean of 3.21 with a standard deviation of .63. Six panelists ranked this item as 4; eleven panelists ranked it as 3; and two panelists ranked it as 2. The Delphi Panel deemed this best practice important. This item achieved stability.

The next best practice was “Examiners learn good/bad examples of comments and key themes; they must evaluate these against the Criteria for effective comments” (item number 11). The final group mean for this item was

3.16 with a standard deviation of .69. Six panelists ranked this item as 4; ten panelists ranked it as 3; and three panelists ranked it as 2. The Delphi Panel deemed this best practice important. This item achieved stability.

The next best practice was “Examiners experience the various tasks required in the various phases of the application process” (item number 13). This item had a Round 3 group mean of 3.11 with a standard deviation of .66. Five panelists ranked this item as 4; eleven panelists ranked it as 3; and three panelists ranked it as 2. The Delphi Panel deemed this best practice important. This item was unstable.

The next best practice was “New examiners receive training with their pre-workshop assignment; they walk through the assignment, practice and complete one Process and Results Item” (item number 9). This item had a Round 3 group mean of 3.00 with a standard deviation of .67. Four panelists ranked this item as 4; eleven panelists ranked it as 3; and four panelists ranked it as 2. The Delphi Panel deemed this best practice important. This item was unstable.

The next best practice was “Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process” (item number 1). This item had a final group mean of 3.00 with a standard deviation of .75. Five panelists ranked this item as 4; nine panelists ranked it as 3; and five panelists ranked it as 2. The Delphi Panel deemed this best practice important. This item achieved stability.

The next best practice was “Examiners participate in an exercise in which each examiner synthesizes the comments of four other examiners and prepares a draft set of comments” (item number 15). This item had a final group mean of 2.95 with a standard deviation of .85. Five panelists ranked this item as 4; nine panelists ranked it as 3; four panelists ranked it as 2; and one panelist ranked it as 1. The Delphi Panel deemed this best practice important. This item achieved stability.

The next best practice was “Examiners participate in an exercise in which they formulate site visit issues and interview questions using the applicant’s terms” (item number 16). This item had a final group mean of 2.84 with a standard deviation of .83. Four panelists ranked this item as 4; nine panelists ranked it as 3; five panelists ranked it as 2; and one panelist ranked it as 1. The Delphi Panel deemed this best practice important. This item achieved stability.

The next best practice was “Trainers develop and deliver the entire training program for consistency” (item number 20). This item had a final group mean of 2.84 with a standard deviation of 1.01. Five panelists ranked this item as 4; nine panelists ranked it as 3; two panelists ranked it as 2; and three panelists ranked it as 1. The Delphi Panel deemed this best practice important. This item achieved stability.

The next best practice was “Examiners are put in triads each day where experienced examiners coach new examiners” (item number 17). This item had a Round 3 group mean of 2.63 with a standard deviation of .68. One panelist ranked this item as 4; eleven panelists ranked it as 3; six panelists ranked it

as 2; and one panelist ranked it as 1. The Delphi Panel deemed this best practice important. This item was unstable.

The next best practice was “Examiners use a web-based ‘Examiner Depot’ method to share their work during training as well as all assessment stages” (item number 3). This item had a final group mean of 2.63 with a standard deviation of .83. Three panelists ranked this item as 4; seven panelists ranked it as 3; eight panelists ranked it as 2; and one panelist ranked it as 1.The Delphi Panel deemed this best practice important. This item achieved stability.

The next best practice was “Examiners work on real applications, and use the case study only as an example of how everything works together and provides examples of well-written comments and key themes” (item number 18). This item had a Round 3 group mean of 2.63 also, but its standard deviation was .90. Four panelists ranked this item as 4; five panelists ranked it as 3; nine panelists ranked it as 2; and one panelist ranked it as 1. The Delphi Panel deemed this best practice important. This item was unstable.

The next best practice was “New examiners participate in Virtual Orientations for New Examiners to guide them in the pre-work process” (item number 5). This item had a final group mean of 2.58 with a standard deviation of .69. Two panelists ranked this item as 4; seven panelists ranked it as 3; and ten panelists ranked it as 2. The Delphi Panel deemed this best practice important. This item achieved stability.

The next best practice was “Examiners learn to use an evaluation worksheet as a way to organize and standardize individual review of an

application" (item number 12). This item had a Round 3 group mean of 2.53 with a standard deviation of .70. Twelve panelists ranked this item as 3; five panelists ranked it as 2; and two panelists ranked it as 1. This was the last item in this set which the Delphi Panel deemed important. This item was unstable.

All of the best practices in this set discussed thus far have been considered important by the Delphi Panel. The remaining six best practices in this set were considered helpful by the panel. There was one item, number 3, considered important in Round 2, which was considered helpful in this third round. However, the test for distinguishing whether two numbers are different, which was used in other rounds, indicates that the change in values for the mean of item 3 between the second and third rounds is not significant.

The highest ranking of the helpful best practices was "Pre-workshop individual review of application does not require scoring as scoring is taught in the initial training workshop" (item number 10). This item had a final group mean of 2.32 with a standard deviation of .67. One panelist ranked this item as 4; five panelists ranked it as 3; twelve panelists ranked it as 2; and one panelist ranked it as 1. This item achieved stability.

The next best practice considered helpful was "Examiners participate in Virtual Examiner Trainings" (item number 4). This item had a Round 3 group mean of 2.21 with a standard deviation of .63. One panelist ranked this item as 4; three panelists ranked it as 3; fourteen panelists ranked it as 2; and one panelist ranked it as 1. This item was unstable.

The next best practice considered helpful was “Examiners train with their actual team using the real application to learn how to be an examiner instead of a case study document. This means examiner teams assigned to an application learn and work together on the actual application” (item number 2). This item had a final group mean of 2.21 with a standard deviation of 1.03. Three panelists ranked this item as 4; three panelists ranked it as 3; eight panelists ranked it as 2; and five panelists ranked it as 1. This item achieved stability.

The next best practice considered helpful was “Examiners are matched with their team during training” (item number 7). This item had a Round 3 group mean of 2.16 with a standard deviation of .69. One panelist ranked this item as 4; three panelists ranked it as 3; thirteen panelists ranked it as 2; and two panelists ranked it as 1. This item was unstable.

The next best practice considered helpful was “Examiner training occurs at different times in the year as applicants apply throughout the year” (item number 14). This item had a final group mean of 2.11 with a standard deviation of .99. Three panelists ranked this item as 4; one panelist ranked it as 3; ten panelists ranked it as 2; and five panelists ranked it as 1. This item achieved stability.

The final best practice in this set, which was also considered helpful, was “Examiners work on their pre-work together with a trainer in Pre-work Labs in computer rooms” (item number 6). This item had a Round 3 group mean of 1.95 with a standard deviation of .78. One panelist ranked this item as 4; two

panelists ranked it as 3; eleven panelists ranked it as 2; and five panelists ranked it as 1. This item was unstable.

In summary, the results for this second ranking of best practices added by the panel were indistinguishable from the results from the previous round. There were no best practices considered essential by the Delphi Panel. Most of the best practices were considered important, and several were considered helpful. Unlike the core competencies which appear in the Baldrige Criteria to which the state programs subscribe, the best practices come from the individual programs rather than the literature. Hence they are specific to each state program and subject to the varied experiences and perspectives of the examiners. The reflection of this trait in the present study is lower means and higher standard deviations which point to the variation in the training programs in the various state Baldrige organizations.

Round 4. Best Practices Added by the Delphi Panel: Final Ranking

Table 10 and Figure 10 show the mean and standard deviation for the best practices added by the Delphi Panel which were unstable at the end of Round 3. All of these best practices achieved stability in Round 4. Eighteen members participated in this final round of the survey.

The highest ranked best practice was “Each step of the examination process is well-defined in sequential order” (item number 9). This item had a final group mean of 3.44 with a standard deviation of .51. Eight panelists ranked

this item as 4 and ten panelists ranked it as 3. The Delphi Panel considered this best practice important.

TABLE 10. Mean and Standard Deviation of Best Practices Added by the Delphi Panel, Round 4 Results

Best Practices	Mean Round 4 Results	Standard Deviation Round 4 Results
9. Each step of the examination process is well- defined in sequential order.	3.44	.51
6. Examiners experience the various tasks required in the various phases of the application process.	3.17	.62
4. New examiners receive training with their pre-workshop assignment; they walk through the assignment, practice and complete one process and results Item.	3.11	.58
8. Examiners work on real applications, and use the case study only as an example of how everything works together and provides examples of well-written comments and key themes.	2.67	.91
7. Examiners are put in triads each day where experienced examiners coach new examiners.	2.61	.78
5. Examiners learn to use an evaluation worksheet as a way to organize and standardize individual review of an application.	2.50	.71
3. Examiners are matched with their team during training.	2.17	.71
1. Examiners participate in Virtual Examiner Trainings.	2.11	.58
2. Examiners work on their pre-work together with a trainer in Pre-work Labs in computer rooms.	1.89	.76

Ranking: **4: essential; 3: important,** but not essential; **2: helpful,** but not important; **1: unimportant,** should not be included

The next best practice was “Examiners experience the various tasks required in the various phases of the application process” (item number 6). This item had a final group mean of 3.17 with a standard deviation of .62. Five panelists ranked this item as 4; eleven panelists ranked it as 3; and two panelists ranked it as 2. The Delphi Panel considered this best practice important.

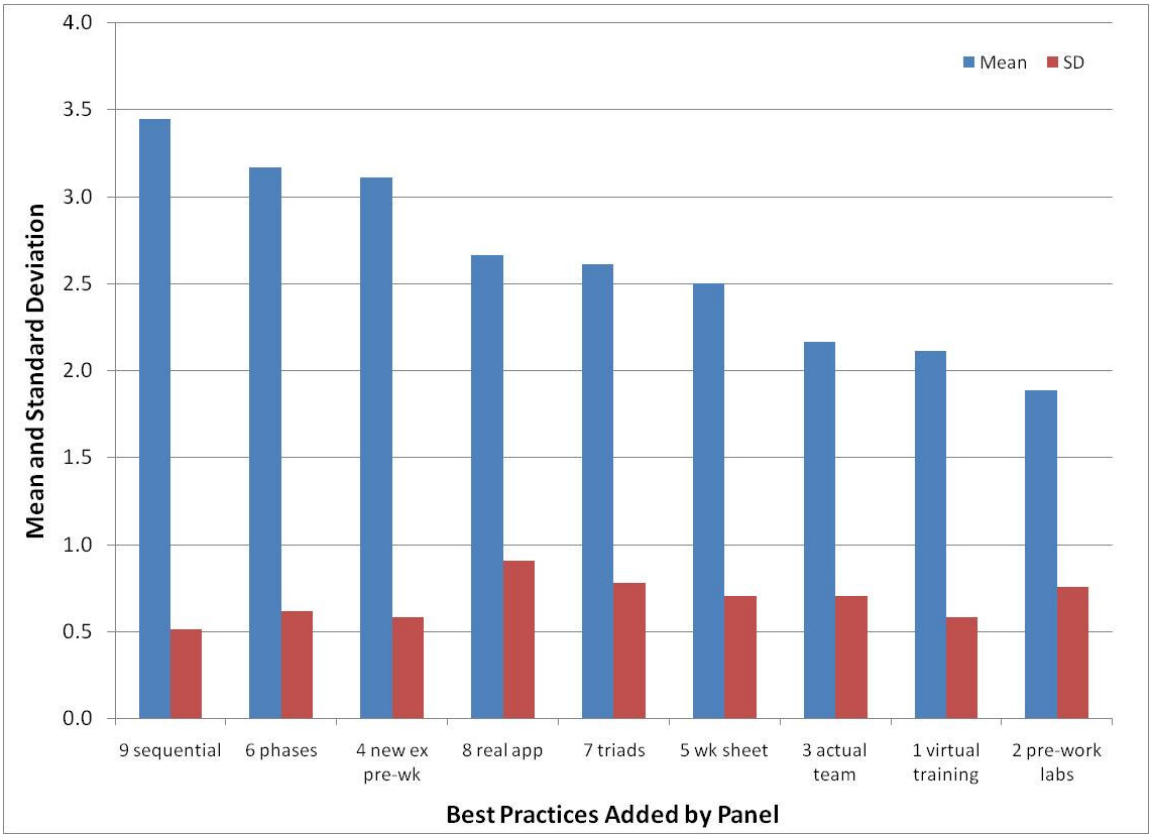

FIGURE 10. Round 4—Mean and standard deviation of best practices added by panel.

The next best practice was “New examiners receive training with their pre-workshop assignment; they walk through the assignment, practice and complete one process and one results item” (item number 4). This item had a final group mean of 3.11 with a standard deviation of .58. Four panelists ranked this item as 4; twelve panelists ranked it as 3; and two panelists ranked it as 2. The Delphi Panel considered this best practice important.

The next best practice was “Examiners work on real applications, and use the case study only as an example of how everything works together and provides examples of well-written comments and key themes” (item number 8).

This item had a final group mean of 2.67 with a standard deviation of .91. Four panelists ranked this item as 4; five panelists ranked it as 3; eight panelists ranked it as 2; and one panelist ranked it as 1. The Delphi Panel considered this best practice important.

The next best practice was “Examiners are put in triads each day where experienced examiners coach new examiners” (item number 7). This item had a final group mean of 2.61 with a standard deviation of .78. One panelist ranked this item as 4; eleven panelists ranked it as 3; four panelists ranked it as 2; and two panelists ranked it as 1. The Delphi Panel considered this best practice important.

The next best practice was “Examiners learn to use an evaluation worksheet as a way to organize and standardize individual review of an application” (item number 5). This item had a final group mean of 2.50 with a standard deviation of .71. Eleven panelists ranked this item as 3; five panelists ranked it as 2; and two panelists ranked it as 1. The Delphi Panel considered this best practice important.

The six best practices above were all considered important. The last three best practices in this set were considered helpful by the panel. The highest ranking of the helpful best practices was “Examiners are matched with their team during training” (item number 3). This item had a final group mean of 2.17 with a standard deviation of .71. One panelist ranked this item as 4; three panelists ranked it as 3; twelve panelists ranked it as 2; and two panelists ranked it as 1.

The next helpful best practice was “Examiners participate in Virtual Examiner Trainings” (item number 1). This item had a final group mean of 2.11 with a standard deviation of .58. One panelist ranked this item as 4; one panelist ranked it as 3; fifteen panelists ranked it as 2; and one panelist ranked it as 1.

The last helpful best practice in this set was “Examiners work on their pre-work together with a trainer in Pre-work Labs in computer rooms” (item number 2). This item had a final group mean of 1.89 with a standard deviation of .76. One panelist ranked this item as 4; one panelist ranked it as 3; eleven panelists ranked it as 2; and five panelists ranked it as 1.

In summary, these nine best practices suggested by the Delphi Panel, which were unstable in the previous round achieved stability in this round. The results were quite similar to the previous round in terms of mean and standard deviation with no change in the labels “importance” or “helpful.” That is, the same items which were considered helpful in the previous round were considered helpful in this round, and those which were considered important in the previous round were likewise considered important in this round. This finding fits with the fact that all the items in this round achieved stability, which means that the frequency of each ranking changed less than 15% relative to the previous round.

In summary of the four rounds of added best practices, the most favored of the best practices added by the panel were those pertaining to having an organized approach and the teaching of comment writing and key themes. Coaching is another added best practice that was considered important. The

least favored best practices were those which offered suggestions which might fit some state organizations but not others. For example having examiners train at various times throughout the year fits with state Baldrige organizations which receive applications throughout the year.

Research Question Three

Research question three asks, “What are the best practices for teaching the core competencies?” In order to answer this question, in Round 3 panelists were asked to relate those best practices with group means at least equal to 3.00 at the end of Round 2 to core competencies with group means at least equal to 3.00 at the end of Round 2. Specifically, the panelists were asked to consider whether each of the best practices in this set was an effective technique for teaching each core competency to examiners. In Round 4 panelists were asked to rank the associated best practices and core competencies for which at least ten panelists considered a given best practice to be associated with a given core competency.

Round 3. Best Practices for Teaching Core Competencies

Table 11 gives the core competencies with group means and standard deviations at the end of Round 2 in which the means were at least equal to 3.00. The Round 2 means and standard deviations were used because the Round 2 results include all the core competencies and best practices. Only a handful of core competencies and best practices were resubmitted to the panel in Round 3

for re-ranking to arrive at consensus. Thus, for consistency, the Round 2 means are displayed in Tables 11, 12, and 13. The set of core competencies in Table 11 includes both original core competencies and core competencies suggested by the Delphi Panel. Similarly Table 12 gives the best practices with group means and standard deviations at the end of Round 2 in which the means were at least equal to 3.00. This table also includes both original best practices as well as those added by the Delphi Panel. Table 13 gives the frequency correlation between the core competencies of Table 11 and the best practices of Table 12 where the frequency is the number of panelists who deemed a given best practice to be, in fact, a best practice for a given core competency. Nineteen panelists participated in Round 3. Only best practices with at least seven responses are discussed here as useful techniques for teaching the core competencies.

Seven represents the number of panelists who associated a given core competency with a given best practice in the matrix of Round 3, which results are summarized in Table 13. The number of panelists associating core competencies with best practices in the matrix ranged from zero to fifteen. Seven was chosen as the cut-off because there was a natural break with seven panelists associating core competencies with best practices thirty-four times. At the other extreme there were only two cases in which fifteen panelists associated a core competency with a best practice. Figure 11 depicts the natural break for the number seven.

TABLE 11. Core Competencies with Means from Round 2 at Least Equal to 3.00, Round 3 Results

Core Competencies	Mean from Round 2 Results	Standard Deviation from Round 2 Results
1. Examiners meet deadlines.	3.90	.30
2. Examiners must have a full understanding of the importance of the organizational profile in setting the context for the way the organization operates.	3.86	.36
3. Examiners abide by Conflict of Interest and Code of Conduct rules.	3.86	.48
4. Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results.	3.81	.40
5. Examiners must learn to write opportunities for improvement (OFIs).	3.81	.40
6. Examiners must learn to relate specific key factors to Criteria items.	3.81	.51
7. Examiners must learn to write strengths.	3.76	.44
8. Examiners understand the meaning of “how.”	3.71	.46
9. Examiners understand that the Criteria are non-prescriptive and adaptable.	3.71	.56
10. Examiners must learn how to score within a range.	3.62	.50
11. Examiners understand that the focus in the results items is on the most critical organizational performance results.	3.62	.50
12. Examiners must learn to evaluate an application in terms of A/D/L/I or Le/T/C/Li/G’s.	3.62	.67
13. Examiners understand the importance of cross-references across categories.	3.58	.51
14. Examiners are willing to ask for help and receive it.	3.52	.51
15. Examiners understand that the Criteria focus on results.	3.52	.68
16. Examiners understand a process for evaluating the application.	3.52	.81
17. Examiners must learn to verify the score/comment balance.	3.48	.60
18. Examiners understand how to complete each step of the examination process.	3.43	.60
19. Examiners need to understand the consensus process and how it affects the score.	3.43	.60
20. Examiners understand that the Criteria support a systems perspective to maintaining organization-wide goal alignment.	3.43	.75
21. Examiners understand the meaning of “what.”	3.38	.67
22. Examiners must understand the site visit, what it is for, how to ask questions, how to **document** findings, how those findings clarify/verify site visit issues, and how the findings should be the basis for their conclusions to resolve the site visit issues.	3.38	.74
23. Examiners know how to give targeted feedback comments that help the applicant move forward on its quality journey but with carefully constructed comments that are not too prescriptive.	3.38	.92
24. Examiners must learn to write meaningful key factors.	3.33	.66
25. Examiners consolidate comments to represent the findings and score of the team.	3.33	.73
26. Examiners exhibit a sense of commitment to the process.	3.33	.80
27. Examiners must have a full understanding of the role the Criteria play in the improvement of overall organizational effectiveness and capabilities.	3.33	.86
28. Examiners can function effectively as team members.	3.29	.85
29. Examiners listen to and learn from other team members.	3.24	.54

TABLE 11. Continued

Core Competencies	Mean from Round 2 Results	Standard Deviation from Round 2 Results
30. Examiners must have a full understanding of the criteria structure with its subsets of Items and Areas to Address.	3.24	.70
31. Examiners must have a full understanding of the system operations (categories 1, 2, 3, 5, 6, and 7) and the system foundation (category 4).	3.24	.77
32. Examiners must learn to write key themes.	3.19	.87
33. Examiners understand the steps in the site visit process including how to identify site visit issues and how to develop site visit worksheets.	3.19	.93
34. Examiners leave the training with a sense of confidence in their ability to perform successfully as examiners.	3.14	.73
35. Examiners understand that the Criteria are complex but not complicated. That is, the Criteria are complex because they consist of several parts, which are linked holistically, but they are not complicated because they can be understood and explained.	3.14	.79
36. Examiners must have a full understanding of the role that the Criteria play in contributing value to customers and stakeholders and organizational sustainability.	3.14	.96
37. Examiners accurately apply "considerations for a small organization" as developed by NIST.	3.10	.62
38. Examiners must have a full understanding of the role the core values and concepts play in the Criteria.	3.10	.70
39. Examiners understand common terminology used during training and the examination process that may not appear in the Criteria glossary.	3.00	.77
40. Examiners learn to prepare for site visits.	3.00	.95

Ranking: **4: essential; 3: important,** but not essential; **2: helpful,** but not important; **1: unimportant,** should not be included

TABLE 12. Best Practices with Means from Round 2 at Least Equal to 3.00, Round 3 Results

Best Practices	Mean from Round 2 Results	Standard Deviation from Round 2 Results
1. Each step of the examination process is well defined in sequential order.	3.43	.87
2. Examiners work in teams to review and improve item comments.	3.38	.86
3. Examiners experience the various tasks required in the various phases of the application process.	3.20	.77
4. Examiners learn good/bad examples of comments and key themes; they must evaluate these against the Criteria for effective comments.	3.14	.73
5. Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a Process and a Results Item.	3.10	.94
6. Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.	3.00	.71
7. Examiners participate in an exercise in which each examiner synthesizes the comments of four other examiners and prepares a draft set of comments.	3.00	.84
8. Examiners learn by using a case study in training.	3.00	1.00

Ranking: **4: essential; 3: important,** but not essential; **2: helpful,** but not important; **1: unimportant,** should not be included

TABLE 13. Best Practices for Teaching Core Competencies, Round 3 Results

Core Competencies	BP 1 Mean 3.43 SD .87	BP 2 Mean 3.38 SD .87	BP 3 Mean 3.20 SD .77	BP 4 Mean 3.14 SD .73	BP 5 Mean 3.10 SD .94	BP 6 Mean 3.00 SD .71	BP 7 Mean 3.00 SD .84	BP 8 Mean 3.00 SD 1.00
1	6	4	8	1	2	7	1	3
2	4	1	3	5	5	7	3	7
3	3	0	1	0	1	2	1	0
4	3	10	6	14	13	11	11	9
5	4	11	4	14	11	11	10	9
6	4	6	3	9	9	7	6	9
7	4	10	4	13	10	10	8	8
8	3	8	4	8	7	10	4	7
9	3	6	3	8	6	10	4	5
10	4	6	5	3	12	9	6	7
11	3	3	0	4	7	9	3	5
12	4	9	6	9	9	7	8	10
13	4	8	5	7	9	8	5	4
14	4	7	3	2	5	13	2	1
15	4	2	2	2	5	5	2	3
16	14	4	12	2	5	7	4	8
17	4	7	6	7	12	10	6	7
18	14	3	11	4	5	11	4	9
19	10	6	11	3	10	9	9	2
20	4	2	2	4	5	7	0	9
21	3	7	2	7	7	8	2	8
22	11	3	10	1	4	8	2	1
23	2	8	2	13	11	9	7	4
24	5	6	3	7	7	9	1	10
25	4	9	6	7	15	8	15	5
26	8	6	5	1	4	8	1	2
27	4	4	2	2	7	7	3	5
28	8	13	7	1	12	9	6	2
29	1	12	7	1	12	7	5	1
30	8	2	7	4	4	8	2	10
31	6	1	5	3	3	6	0	8
32	6	4	5	12	7	10	3	7
35	5	3	4	4	6	9	2	6
36	6	2	4	1	3	6	0	6
37	4	5	4	5	5	9	2	8
38	6	2	1	2	2	7	1	2
39	unranked							
40	11	1	11	1	2	10	2	3

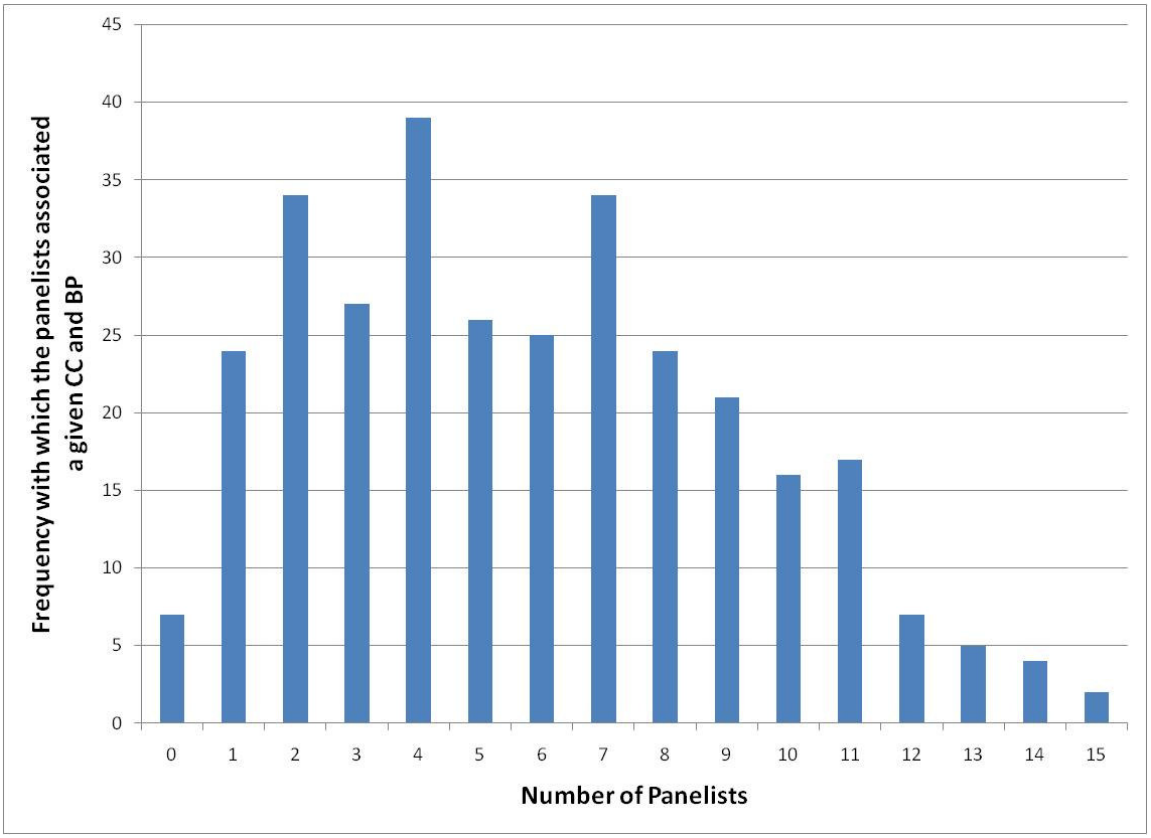

FIGURE 11. The frequency with which panelists associated core competencies with best practices in the matrix of round 3.

Round 3. Best Practices Selected for Each Core Competency

The first core competency, which had the highest Delphi panel mean at the end of Round 2, is “Examiners meet deadlines.” This item did not appear in Round 1 as it was added by the panelists in Round 1 and included for initial ranking in Round 2. The Round 2 group mean was 3.90 with a standard deviation of .30. Best practice 3, “Examiners experience the various tasks required in the various phases of the application process,” with eight responses and best practice 6, “Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process” with seven responses were considered useful in teaching this core competency. This

core competency reflects a character trait which may be influenced by an understanding of the importance of the tight time schedule in the various phases.

The second core competency is “Examiners have a full understanding of the importance of the organizational profile in setting the context for the way the organization operates.” The final group mean at the end of Round 2 was 3.86 with a standard deviation of .36. Best practice 6, “Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process,” and best practice eight, “Examiners learn by using a case study in training,” both with seven responses were considered useful for teaching the core competency. The case study contains an organizational profile, so examiners are exposed to the organizational profile in their pre-work case study. One panelist commented that because coaching is vital to the process, he chose it for many of his responses. Another panelist omitted the case study from all her responses because her experience has shown that it is not particularly effective as a training tool.

The third core competency is “Examiners abide by the Conflict of Interest and Code of Conduct rules.” This core competency was added by the panel and appeared for ranking for the first time in Round 2. The Round 2 group mean was 3.86 with a standard deviation of .48. There was no strong consensus with any of the best practices for teaching this core competency. Three of the best practices had a frequency response of 0 and the maximum number of responses was 3 for one of the best practices when panelists were asked whether any of

the best practices was, in fact, a best practice for teaching this core competency. This result may reflect what is perceived as an intrinsic character trait of an examiner rather than a skill which can be taught.

The fourth core competency is “Examiners know how to write comments that tie feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results.” This item, which was added by the panel, appeared initially in Round 2. The Round 2 group mean was 3.81 with a standard deviation of .40. Unlike the first three core competencies discussed, the fourth essential core competency is associated with several essential best practices as it deals with specific skills needed by examiners which can be taught effectively. Best practice 2, “Examiners work in teams to review and improve item comments,” with ten responses, best practice 4, “Examiners learn good/bad examples of comments and key themes; they must evaluate these against the Criteria for effective comments,” with fourteen responses, best practice 5, “Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a Process and a Results Item,” with thirteen responses, best practice 6, “Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process,” with eleven responses, best practice 7, “Examiners participate in an exercise in which each examiner synthesizes the comments of four other examiners and prepares a draft set of comments,” with eleven responses, and best practice 8, “Examiners learn by using a case study in training,” with nine

responses were all considered useful in teaching this core competency. A typical training session might have several work tables in the room with an actual or mock team gathered at each table. Best practices 2, 4, 5, and 7 specifically address comments; while best practice 2 and 5 also address teamwork. It is expected that these best practices are effective in teaching comment writing.

Best practice 6, which involves coaching, was also considered useful and best practice 8, which refers to the case study were both considered helpful as these are general best practices which can be applied to many core competencies. As some panelists believe the case study to be useful and others considered unhelpful, further study might reveal its value. The case study, when assigned as pre-work, requires many hours of work.

The fifth core competency is “Examiners learn to write opportunities for improvement (OFIs).” This item appeared in the first round and achieved stability by the second round. The final group mean at the end of Round 2 was 3.81 with a standard deviation of .40. Best practice 2, “Examiners work in teams to review and improve item comments,” with eleven responses, best practice 4, “Examiners learn good/bad examples of comments and key themes; they must evaluate these against the Criteria for effective comments,” with fourteen responses, best practice 5, “Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a Process and a Results Item,” with eleven responses, best practice 6, “Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout

the process," with eleven responses, best practice 7, "Examiners participate in an exercise in which each examiner synthesizes the comments of four other examiners and prepares a draft set of comments," with ten responses, and best practice 8, "Examiners learn by using a case study in training," with nine responses were considered useful in teaching this core competency. This core competency refers to a particular type of comment. There are two types of comments: strengths and opportunities for improvement (OFIs). The favored best practices for this core competency were the same as the favored ones for core competency 4, which refers to both kinds of comments. As comment writing comprises the bulk of the work in the individual review, these two core competencies and their associated best practices are critical to the initial training.

The sixth core competency is "Examiners learn to relate specific key factors to Criteria items." Key factors are factors which are important to the applicant and usually appear in the organizational profile. This core competency appeared in the first round and achieved stability in the second round. The final group mean at the end of Round 2 was 3.81 with a standard deviation of .51. The standard deviation for this item is larger than the standard deviation of the previous core competencies because three numbers appeared in the rankings whereas previously the numbers clustered around one or two ranks. The most favored best practices for teaching this core competency were best practice 4, "Examiners learn good/bad examples of comments and key themes; they must evaluate these against the Criteria for effective comments," with nine responses,

best practice 5, “Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a Process and a Results Item,” with nine responses, best practice 6, “Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process,” with seven responses, and best practice 8, “Examiners learn by using a case study in training,” with nine responses. While the key factors are generally introduced in the organizational profile, they appear throughout the application and thus make their way into comments. When examiners tie key factors to the Criteria, the score is influenced. Best practices 4 and 5 are thus relevant as they relate to comments, the Criteria, and scoring. Coaching helps team members effectively evaluate an application. The case study provides an example of an application which is often used throughout the initial training.

The seventh core competency is “Examiners learn to write strengths.” This appeared in the first round and achieved stability by Round 2. The final group mean at the end of Round 2 was 3.76 with a standard deviation of .44. As mentioned earlier a strength is a type of comment. Comment writing forms the core teaching of the initial examiner training. The only best practices which the panel did not consider useful for teaching this core competency were the order of the process (best practice 1) and the overview of the various phases (best practice 3). The other six best practices were considered effective in teaching this core competency. Best practice 2, “Examiners work in teams to review and improve item comments,” had ten responses; best practice 4, “Examiners learn

good/bad examples of comments and key themes; they must evaluate these against the Criteria for effective comments," had thirteen responses; best practice 5, "Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a Process and a Results Item," had ten responses; best practice 6, "Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process," had ten responses; best practice 7, "Examiners participate in an exercise in which each examiner synthesizes the comments of four other examiners and prepares a draft set of comments," had eight responses; and best practice 8, "Examiners learn by using a case study in training," had eight responses.

Best practices 2, 4, 5, and 7 deal specifically with comments. Best practice 6 acknowledges the value of coaching, and best practice 8 acknowledges the value of the case study. These two best practices are generally applicable.

The eighth core competency is "Examiners understand the meaning of 'how.'" "How refers" to the process just as best practices refer to the process of teaching content. There are many "how" questions for the applicant to address throughout the Criteria. This item appeared initially in Round 1 and achieved stability in Round 2. The final group mean at the end of Round 2 was 3.71 with a standard deviation of .46.

Best practice 2, "Examiners work in teams to review and improve item comments," with eight responses, best practice 4, "Examiners learn good/bad

examples of comments and key themes; they must evaluate these against the Criteria for effective comments," with eight responses, best practice 5, "Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a Process and a Results Item," with seven responses, best practice 6, "Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process," with ten responses, and best practice 8, "Examiners learn by using a case study in training," with seven responses were favored by the panel.

The ninth core competency is "Examiners understand that the Criteria are non-prescriptive and adaptable." This item initially appeared in Round 1 and achieved stability in Round 2. The final group mean at the end of Round 2 was 3.71 with a standard deviation of .56. The standard deviation is greater than .5 because of the distribution of responses over three of the four possible ranks. However, the strong clustering of responses in favor of rank 4 kept the standard deviation from being higher.

Best practice 4, "Examiners learn good/bad examples of comments and key themes; they must evaluate these against the Criteria for effective comments," with eight responses and best practice 6, "Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process," with ten responses were favored for teaching this core competency. Best practice 4 is the only core competency in this set which specifically mentions the Criteria. Coaching is generally favored in helping

examiners learn the core competencies. This core competency refers to an understanding rather than a specific skill.

The tenth core competency is “Examiners learn to score within a range.” This item initially appeared in Round 1 and achieved stability in Round 2. The final group mean at the end of Round 2 was 3.62 with a standard deviation of .50. Best practice 5, “Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a Process and a Results Item,” with twelve responses, best practice 6, “Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process,” with nine responses, and best practice 8, “Examiners learn by using a case study in training,” with seven responses were the most favored for teaching this core competency. Best practice 5 specifically deals with scoring. Coaching and the case study were considered to be generally effective tools.

The eleventh core competency is “Examiners understand that the focus in the results items is on the most critical organizational performance results.” This item appeared initially in Round 1 and achieved stability in Round 2. The final group mean at the end of Round 2 was 3.62 with a standard deviation of .50. Best practice 5, “Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a Process and a Results Item,” with seven responses and best practice 6, “Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process,” with

nine responses were the only best practices considered useful for teaching this core competency perhaps because it refers to understanding rather than a specific skill. Best practice 5 was considered useful because it specifically mentions results.

The twelfth core competency is “Examiners learn to evaluate an application in terms of A/D/L/I or Le/T/C/Li/G’s.” This item appeared initially in Round 1 and achieved stability in Round 2. The final group mean at the end of Round 2 was 3.62 with a standard deviation of .67. Best practice 2, “Examiners work in teams to review and improve item comments,” with nine responses; best practice 4, “Examiners learn good/bad examples of comments and key themes; they must evaluate these against the Criteria for effective comments,” with nine responses, best practice 5, “Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a Process and a Results Item,” with nine responses, best practice 6, “Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process,” with seven responses, best practice 7, “Examiners participate in an exercise in which each examiner synthesizes the comments of four other examiners and prepares a draft set of comments,” with eight responses, and best practice 8, “Examiners learn by using a case study in training,” with ten responses were favored.

In some states examiners complete worksheets accompanying the case study and the actual application to indicate which factors (such as approach or

deployment) apply. The scoring depends on these factors. Comments refer to whether or not the applicant has accomplished the factors. An applicant who accomplishes all the factors will receive a high score on that particular item. For example, a comment might state that the applicant has an approach but has not deployed the approach. This item would receive a low score. The best practices dealing with comments apply to this competency. Further, whether an applicant has applied these factors for each item is discussed during consensus.

The thirteenth core competency is “Examiners understand the importance of cross-references across categories.” This item initially appeared in Round 1 and achieved stability in Round 2. The final group mean at the end of Round 2 was 3.58 with a standard deviation of .51. Best practice 2, “Examiners work in teams to review and improve item comments,” with eight responses, best practice 4, “Examiners learn good/bad examples of comments and key themes; they must evaluate these against the Criteria for effective comments,” with seven responses, best practice 5, “Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a Process and a Results Item,” with nine responses, and best practice 6, “Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process,” with eight responses were favored. Teamwork and coaching can help examiners understand cross-referencing. Key themes are usually synthesized from comments that tie a few categories together.

The fourteenth core competency is “Examiners are willing to ask for help and receive it.” This item, which was added by the panel, initially appeared in Round 2. The Round 2 group mean was 3.52 with a standard deviation of .51. Best practice 2, “Examiners work in teams to review and improve item comments,” with seven responses and best practice 6, “Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process,” with thirteen responses were consider useful in teaching this core competency. Coaches can encourage examiners to seek help.

The fifteenth core competency is “Examiners understand that the Criteria focus on results.” This item initially appeared in Round 1 and achieved stability in Round 2. The final group mean at the end of Round 2 was 3.52 with a standard deviation of .68. There were no essential best practices with at least seven responses associated with this core competency. Again this item refers to a concept rather than a specific skill which can be taught. Thus there were no techniques considered useful for teaching this core competency.

The sixteenth core competency is “Examiners understand a process for evaluating the application.” This core competency, which was added by the panel, initially appeared in Round 2. The Round 2 group mean was 3.52 with a standard deviation of .81. Best practice 1, “Each step of the examination process is well defined in sequential order,” with fourteen responses, best practice 3, “Examiners experience the various tasks required in the various phases of the application process,” with twelve responses, best practice 6, “Examiners receive

coaching on their work as part of training from a coach that will remain with the team throughout the process," with seven responses, and best practice 8, "Examiners learn by using a case study in training," with eight responses were considered useful for teaching this core competency. Best practices 1 and 3 refer to processes. Thus these specifically pertain to teaching this competency. Coaching and the case study were considered generally helpful.

The seventeenth core competency is "Examiners learn to verify the score/comment balance." This item initially appeared in Round 1 and achieved stability in Round 2. The final group mean at the end of Round 2 was 3.48 with a standard deviation of .60. Best practice 2, "Examiners work in teams to review and improve item comments," with seven responses, best practice 4, "Examiners learn good/bad examples of comments and key themes; they must evaluate these against the Criteria for effective comments," with seven responses, best practice 5, "Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a Process and a Results Item," with twelve responses, best practice 6, "Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process," with ten responses, and best practice 8, "Examiners learn by using a case study in training," with seven responses were considered useful for teaching this core competency. Best practice 5 specifically addresses comments and scoring. Best practices 2 and 4 specifically address comments, and best practices 6 and 8 are generally applicable.

The eighteenth core competency is “Examiners understand how to complete each step of the examination process.” This item, which was added by the panel, initially appeared in Round 2. The Round 2 group mean was 3.43 with a standard deviation of .60. Best practice 1, “Each step of the examination process is well defined in sequential order,” with fourteen responses, best practice 3, “Examiners experience the various tasks required in the various phases of the application process,” with eleven responses, best practice 6, “Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process,” with eleven responses, and best practice 8, “Examiners learn by using a case study in training,” with nine responses were considered useful for teaching this core competency. Best practices 1 and 3 specifically apply to completing each step of the examination process, while best practices 6 and 8 are generally applicable.

The nineteenth essential core competency is “Examiners need to understand the consensus process and how it affects the score.” The consensus process immediately follows the independent review process. This item, which was added by the panel, initially appeared in Round 2. The Round 2 group mean was 3.43 with a standard deviation of .60. Best practice 1, “Each step of the examination process is well defined in sequential order,” with ten responses, best practice 3, “Examiners experience the various tasks required in the various phases of the application process,” with eleven responses, best practice 5, “Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on

scoring for a Process and a Results Item," with ten responses, best practice 6, "Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process," with nine responses, and best practice 7, "Examiners participate in an exercise in which each examiner synthesizes the comments of four other examiners and prepares a draft set of comments," with nine responses were considered useful in teaching this core competency. Best practices 1 and 3 present an overview of the entire process. Best practice 5 specifically mentions consensus and best practice 7 provides an example of what actually occurs in the consensus process.

The twentieth core competency is "Examiners understand that the Criteria support a systems perspective to maintaining organization-wide goal alignment." This item initially appeared in Round 1 and achieved stability in Round 2. The final group mean at the end of Round 2 was 3.43 with a standard deviation of .75. The reason for the higher standard deviation is due to the distribution across three rankings as well as the lack of clustering around one ranking. Best practice 6, "Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process," with seven responses and best practice 8, "Examiners learn by using a case study in training," with nine responses were the only two best practices with at least seven responses. These two general best practices are capable of providing the broad conceptual base needed for this core competency.

The twenty-first core competency is "Examiners understand the meaning of 'what.'" "What" refers to content or what is taught. Core competencies answer

the question “what” while best practices answer the question “how.” This item initially appeared in Round 1 and achieved stability in Round 2. The final group mean at the end of Round 2 was 3.38 with a standard deviation of .67. Best practice 2, “Examiners work in teams to review and improve item comments,” with seven responses; best practice 4, “Examiners learn good/bad examples of comments and key themes; they must evaluate these against the Criteria for effective comments,” with seven responses, best practice 5, “Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a Process and a Results Item,” with seven responses, best practice 6, “Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process,” with eight responses, and best practice 8, “Examiners learn by using a case study in training,” with eight responses were considered useful in teaching this core competency, which requires an understanding rather than the mastery of a skill.

The twenty-second essential core competency is “Examiners understand the site visit, whit it is for, how to ask questions, how to **document** findings, how those findings clarify/verify site visit issues, and how the findings should be the basis for their conclusions to resolve the site visit issues.” This item, which was added by the panel, initially appeared in Round 2. The Round 2 group mean was 3.38 with a standard deviation of .74. Best practice 1, “Each step of the examination process is well defined in sequential order,” with eleven responses, best practice 3, “Examiners experience the various tasks required in the various

phases of the application process," with ten responses, and best practice 6, "Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process," with eight responses were considered useful for teaching this core competency. As this core competency refers to the future site visit, the overview best practices and coaching were the most favored responses.

The twenty- third core competency is "Examiners know how to give targeted feedback comments that help the applicant move forward on its quality journey but with carefully constructed comments that are not too prescriptive." While this core competency was suggested by members of the Delphi Panel, some members objected to the notion that comments might be the least bit prescriptive as the Criteria specifically state that comments are to be non-prescriptive. This core competency initially appeared in Round 2. The Round 2 group mean was 3.38 with a standard deviation of .92. The large standard deviation is due to the wide distribution and lack of clustering around one ranking. Because this core competency refers to comments and because there are several best practices in this set which refer to comments, there were several best practices favored for teaching this core competency.

Best practice 2, "Examiners work in teams to review and improve item comments," with eight responses, best practice 4, "Examiners learn good/bad examples of comments and key themes; they must evaluate these against the Criteria for effective comments," with thirteen responses, best practice 5, "Examiners work in teams to review individual comments and scoring, agree on

the important strengths and OFIs, write comments and reach consensus on scoring for a Process and a Results Item," with eleven responses, best practice 6, "Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process," with nine responses, and best practice 7, "Examiners participate in an exercise in which each examiner synthesizes the comments of four other examiners and prepares a draft set of comments," with seven responses were considered useful in teaching this core competency.

The twenty-fourth core competency is "Examiners learn to write meaningful key factors." The applicant generally introduces the key factors into the organizational profile and continues to use the key factor terms throughout the application as these are factors that are significant to the applicant. This item initially appeared in Round 1 and achieved stability in Round 2. The final group mean at the end of Round 2 was 3.33 with a standard deviation of .66.

Best practice 4, "Examiners learn good/bad examples of comments and key themes; they must evaluate these against the Criteria for effective comments," with seven responses, best practice 5, "Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a Process and a Results Item," with seven responses, best practice 6, "Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process," with nine responses, and best practice 8, "Examiners learn by using a case study in training," with ten responses were

considered useful in teaching this core competency. Key factors appear in comments; hence best practices related to comments were associated with this core competency. The organizational profile of the case study is used in some state training programs to teach examiners how to identify key factors. Thus, the best practice dealing with the case study is applicable.

The twenty-fifth core competency is “Examiners consolidate comments to represent the findings of the team.” This item, which was added by the panel, initially appeared in Round 2. The Round 2 group mean was 3.33 with a standard deviation of .73. Best practice 2, “Examiners work in teams to review and improve item comments,” with nine responses, best practice 4, “Examiners learn good/bad examples of comments and key themes; they must evaluate these against the Criteria for effective comments,” with seven responses, best practice 5, “Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a Process and a Results Item,” with fifteen responses, best practice 6, “Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process,” with eight responses,” and best practice 7, “Examiners participate in an exercise in which each examiner synthesizes the comments of four other examiners and prepares a draft set of comments,” with fifteen responses were considered effective in teaching this core competency. Best practices 5 and 7 were considered effective by most of the panel members. Best practice 5 endorses teamwork in writing

comments, and best practice 7 provides an exercise for teaching this core competency.

The twenty-sixth core competency is “Examiners exhibit a sense of commitment to the process.” This item, which was added by the panel, initially appeared in Round 2. The Round 2 group mean was 3.33 with a standard deviation of .80. Best practice 1, “Each step of the examination process is well defined in sequential order,” with eight responses and best practice 6, “Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process,” with eight responses were considered useful in teaching this core competency. Defining each step of the process and coaching examiners may strengthen the sense of commitment examiners feel for the process. There was not a majority of panelists endorsing either of these best practices perhaps because this core competency reflects a character trait rather than a teachable skill.

The twenty-seventh core competency is “Examiners have a full understanding of the role the Criteria play in the improvement of overall organizational effectiveness and capabilities.” This essential core competency was introduced in Round 1 and achieved stability in Round 2. The final group mean at the end of Round 2 was 3.33 with a standard deviation of.86, which is high because of the distribution across all four rankings and the lack of clustering around any one of the four rankings. Best practice 5, “Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a

Process and a Results Item," with seven responses and best practice 6, "Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process," with seven responses were the only two best practices considered useful for teaching this core competency. Some panelists commented that after a few years, examiners gain insight and understanding of the Criteria. One panelist commented that examiners cannot be taught a full understanding of the Criteria in the short training sessions. This core competency, while important, is one that requires time and experience to master.

The twenty-eighth core competency is "Examiners function effectively as team members." This item, which was added by the panel, appeared initially in Round 2. The Round 2 group mean was 3.29 with a standard deviation of .85. As several best practices refer to teamwork, there are several which were considered effective in teaching this core competency. Best practice 1, "Each step of the examination process is well defined in sequential order," with eight responses, best practice 2, "Examiners work in teams to review and improve item comments," with thirteen responses, best practice 3, "Examiners experience the various tasks required in the various phases of the application process," with seven responses, best practice 5, "Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a Process and a Results Item," with twelve responses, and best practice 6, "Examiners receive coaching on their work as part of training from a coach that will remain with the

team throughout the process," with nine responses were considered useful in teaching this core competency. Best practices 2 and 5, which had the most responses, deal specifically with teamwork.

The twenty-ninth core competency is "Examiners listen to and learn from other team members." This item, which was added by the panel, initially appeared in Round 2. The Round 2 group mean was 3.24 with a standard deviation of .54. A similar result to the previous core competency is found in this one as this one also deals with teamwork. Best practice 2, "Examiners work in teams to review and improve item comments," with twelve responses, best practice 3, "Examiners experience the various tasks required in the various phases of the application process," with seven responses, best practice 5, "Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a Process and a Results Item," with twelve responses, and best practice 6, "Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process," with seven responses were considered useful in teaching this core competency.

The thirtieth core competency is "Examiners have a full understanding of the Criteria structure with its subsets of Items and Areas to Address." This item was initially introduced in Round 1 and achieved stability in Round 2. The final group mean at the end of Round 2 was 3.24 with a standard deviation of .70. This core competency deals with an understanding of the Criteria just as core competencies 19, 25, and 28 do. This core competency relates to Core

Competency 12 as the subsets of Criteria questions ask the applicant about the deployment, learning, and integration for processes and the trends, comparisons, and linkages for results. Best practice 1, “Each step of the examination process is well defined in sequential order,” with eight responses, best practice 3, “Examiners experience the various tasks required in the various phases of the application process,” with seven responses, best practice 6, “Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process,” with eight responses, and best practice 8, “Examiners learn by using a case study in training,” with ten responses were considered useful in teaching this core competency. Of these best practices, the case study was the most favored for exemplifying how an application answers the questions presented in the Criteria.

The thirty-first core competency is “Examiners have a full understanding of the importance of the system operation (Categories 1 – 3 and 5 – 7) and the system foundation (Category 4).” This item was initially introduced in Round 1 and achieved stability in Round 2. The final group mean at the end of Round 2 was 3.24 with a standard deviation of .77. The only best practice considered useful in teaching this core competency was best practice 8, “Examiners learn by using a case study in training,” with eight responses. This core competency is similar to Core Competency 25, which asks examiners to fully understand the Criteria. The comments that panelists made for core competency 25 also apply to this core competency. Furthermore, none of the best practices listed in this set specifically pertain to teaching each category of the Criteria. The focus in

training is the teaching of comment writing based on relating the application to the Criteria. The Criteria provide the structural framework. Finally this core competency deals with a conceptual understanding of the Criteria rather than a specific skill.

The thirtieth-second core competency is “Examiners learn to write key themes.” This item was initially introduced in Round 1 and achieved stability in Round 2. The final group mean at the end of Round 2 was 3.19 with a standard deviation of .87. Best practice 4, “Examiners learn good/bad examples of comments and key themes; they must evaluate these against the Criteria for effective comments,” with twelve responses, best practice 5, “Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a Process and a Results Item,” with seven responses, best practice 6, “Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process” with ten responses, and best practice 8, “Examiners learn by using a case study in training,” with seven responses were considered useful in teaching this core competency. As best practice 4 specifically addresses key themes, it was the most favored of the best practices.

The thirty-third core competency is “Examiners understand the steps in the site visit process including how to identify site visit issues and how to develop site visit worksheets.” This item, which was added by the panel, initially appeared in Round 2. The Round 2 group mean was 3.19 with a standard deviation of .93. Because this item involves specific skills, one would expect that

there would be best practices associated with the teaching of this item. However, most state Baldrige programs have additional training prior to the site visit. Best practice 1, “Each step of the examination process is well defined in sequential order,” with eleven responses, best practice 3, “Examiners experience the various tasks required in the various phases of the application process,” with eleven responses, and best practice 6, “Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process,” with eight responses were considered useful. The two most favored best practices were ones dealing with the entire examination process, which is appropriate as the site visit occurs months after the initial training and the independent review.

The thirty-fourth core competency is “Examiners leave with a sense of confidence in their ability to perform successfully as examiners.” This item, which was added by the panel, initially appeared in Round 2. The Round 2 group mean was 3.14 with a standard deviation of .73. Best practice 1, “Each step of the examination process is well defined in sequential order,” with eleven responses, best practice 3, “Examiners experience the various tasks required in the various phases of the application process,” with eleven responses, best practice 4, “Examiners learn good/bad examples of comments and key themes; they must evaluate these against the Criteria for effective comments,” with seven responses, best practice 5, “Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a Process and a Results Item,”

with eight responses, best practice 6, “Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process,” with eleven responses, and best practice 8, “Examiners learn by using a case study in training,” with seven responses were considered useful in teaching this core competency. The most favored best practices were the two regarding the overview of the entire process and the coaching best practice.

The thirty-fifth core competency is “Examiners understand that the Criteria are complex but not complicated. That is, the Criteria are complex because they consist of several parts, which are linked holistically, but they are not complicated because they can be understood and explained.” This item, which was added by the panel, initially appeared in Round 2. The Round 2 group mean was 3.14 with a standard deviation of .79. The only best practice considered useful was best practice 6, “Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process,” with nine responses. Coaches can help examiners understand the way the parts of the Criteria fit together holistically. This core competency represents a concept rather than a teachable skill.

The thirty-sixth core competency is “Examiners have a full understanding of the role the Criteria play in contributing value to customers and stakeholders and organizational effectiveness and sustainability.” This item initially appeared in Round 1 and achieved stability in Round 2. The final group mean at the end of Round 2 was 3.14 with a standard deviation of .96. The responses for the best practices were all less than seven probably because this item involves an

understanding of abstract ideas rather than a skill which can be taught in a training workshop.

The thirty-seventh essential core competency is “Examiners accurately apply ‘considerations for a small organization’ as developed by NIST.” This item, which was added by the panel, initially appeared in Round 2. The Round 2 group mean was 3.10 with a standard deviation of .62. Best practice 6, “Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process,” with nine responses and best practice 8, “Examiners learn by using a case study in training,” with eight responses were considered useful in teaching this core competency. That is, the general best practices of coaching and the case study might be employed in teaching this core competency.

The thirty-eighth core competency is “Examiners have a full understanding of the role the core values and concepts play in the Criteria.” This item initially appeared in Round 1 and achieved stability in Round 2. The final group mean at the end of Round 2 was 3.10 with a standard deviation of .70. Best practice 6, “Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process,” with seven responses was the only best practice considered useful for teaching this core competency which involves an understanding rather than a specific skill.

The thirty-ninth core competency is “Examiners understand common terminology used during training and the examination process that may not appear in the Criteria glossary.” This core competency, which was added by the

panel, initially appeared in Round 2. The Round 2 group mean was 3.00 with a standard deviation of .77. This item was identified as a core competency but was not rated by the panel with respect to best practices, and thus there were no best practices associated with this core competency.

The fortieth essential core competency is “Examiners learn to prepare for site visits.” This item, which was added by the panel, initially appeared in Round 2. The Round 2 group mean was 3.00 with a standard deviation of .95. Like Core Competencies 22 and 31, this core competency deals with site visits. Best practice 1, “Each step of the examination process is well defined in sequential order,” with eleven responses, best practice 3, “Examiners experience the various tasks required in the various phases of the application process,” with eleven responses, and best practice 6, “Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process,” with ten responses were considered useful in teaching this core competency. Best practices 1 and 3 refer to an overview of the entire process, while best practice 6 refers to coaching. As a coach is expected to work with a team throughout the entire process this best practice is effective.

In summary, best practice 1, “Each step of the examination process is well-defined in sequential order” and best practice 3, “Examiners experience the various tasks required in the various phases of the application process” were associated together and appeared with core competencies dealing with phases of the process beyond the independent review. Best practice 2, “Examiners work

in teams to review and improve item comments" and best practice 5, "Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item" were associated together and appeared with core competencies dealing with teamwork and comment writing. There were a few best practices pertaining to comment writing that fit nicely with core competencies dealing with comment writing, which is the focus of the initial training. Best practice 6, "Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process" and best practice 8, "Examiners learn by using a case study in training," which are generally applicable to most core competencies, were often associated together and appeared with core competencies that did not have best practices targeted for them. These two best practices were often chosen for conceptual core competencies.

Round 3. Core Competencies Associated with Each Best Practice

As previously mentioned, Table 11 gives the core competencies with group means and standard deviations at the end of Round 2 in which the means were at least equal to 3.00. This set of core competencies includes both original core competencies and core competencies suggested by the Delphi Panel. Similarly, as previously mentioned, Table 12 gives the best practices with group means and standard deviations at the end of Round 2 in which the means were at least equal to 3.00. This table also includes both original best practices as

well as those added by the Delphi Panel. As previously mentioned, Table 13 gives the frequency correlation between the core competencies of Table 11 and the best practices of Table 12 where the frequency is the number of panelists who deemed a given best practice to be, in fact, a best practice for a given core competency. The panelists did not rank this set of associated best practices and core competencies. They merely checked whether they considered a best practice to be associated with a core competency. Hence the tables and figures reflect the means and standard deviations at the end of Round 2. Nineteen panelists participated in Round 3. Only best practices with at least seven responses are discussed here as useful techniques for teaching the core competencies.

The first best practice is, “Each step of the examination process is well-defined in sequential order.” This best practice, which was added by the panel, had a Round 2 group mean of 3.43 with a standard deviation of .87. Figure 12 illustrates the frequency with which the panel members associated each core competency with this best practice. Table 14 lists the core competencies associated with this best practice.

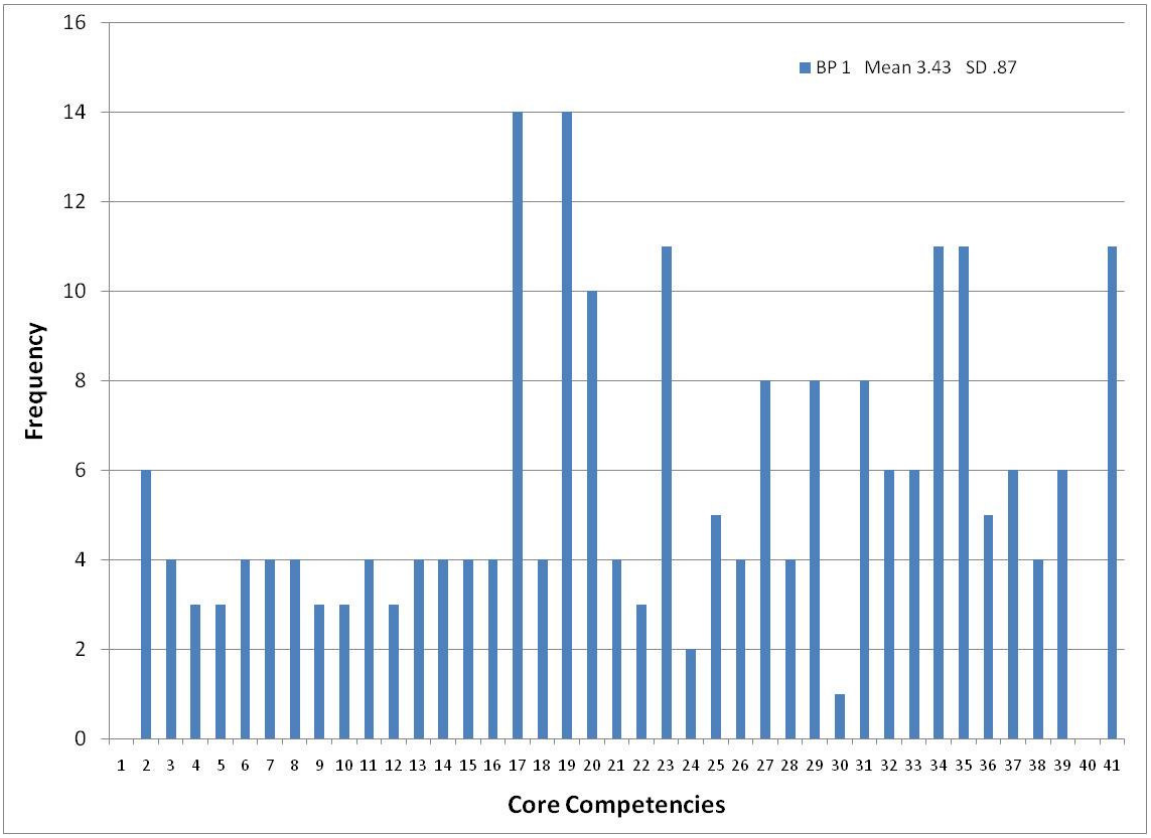

FIGURE 12. Frequency of core competencies associated with best practice 1: Each step of the examination process is well defined in sequential order.

There were ten core competencies with at least seven responses from the panel associated with this best practice. The core competencies associated with this best practice generally fall into two categories: those which refer to a process and those dealing with aspects of the evaluation post-individual review such as consensus and site visit. An additional core competency dealing with imparting confidence to examiners was also paired with this best practice.

TABLE 14. Core Competencies Associated with Best Practice 1: Each Step of the Examination Process is Well Defined in Sequential Order, Round 3 Results

Associated Core Competencies from Table 11 (at least 7 panelists associated these CCs with BP1)	Mean from Round 2 Results	Standard Deviation from Round 2 Results
16. Examiners understand a process for evaluating the application.	3.52	.81
18. Examiners understand how to complete each step of the examination process.	3.43	.60
19. Examiners need to understand the consensus process and how it affects the score.	3.43	.60
22. Examiners must understand the site visit, what it is for, how to ask questions, how to **document** findings, how those findings clarify/verify site visit issues, and how the findings should be the basis for their conclusions to resolve the site visit issues.	3.38	.74
26. Examiners exhibit a sense of commitment to the process.	3.33	.80
28. Examiners can function effectively as team members.	3.29	.85
30. Examiners must have a full understanding of the criteria structure with its subsets of Items and Areas to Address.	3.24	.70
33. Examiners understand the steps in the site visit process including how to identify site visit issues and how to develop site visit worksheets.	3.19	.93
34. Examiners leave the training with a sense of confidence in their ability to perform successfully as examiners.	3.14	.73
40. Examiners learn to prepare for site visits.	3.00	.95
Best Practice: 1; Mean: 3.43; Standard Deviation: .87 from Round 2 results		

The second best practice is, “Examiners work in teams to review and improve item comments.” This was one of the original best practices and had a final group mean at the end of Round 2 of 3.38 with a standard deviation of .87. Figure 13 illustrates the frequency with which the panel members associated each core competency with this best practice. Table 15 lists the core competencies associated with this best practice.

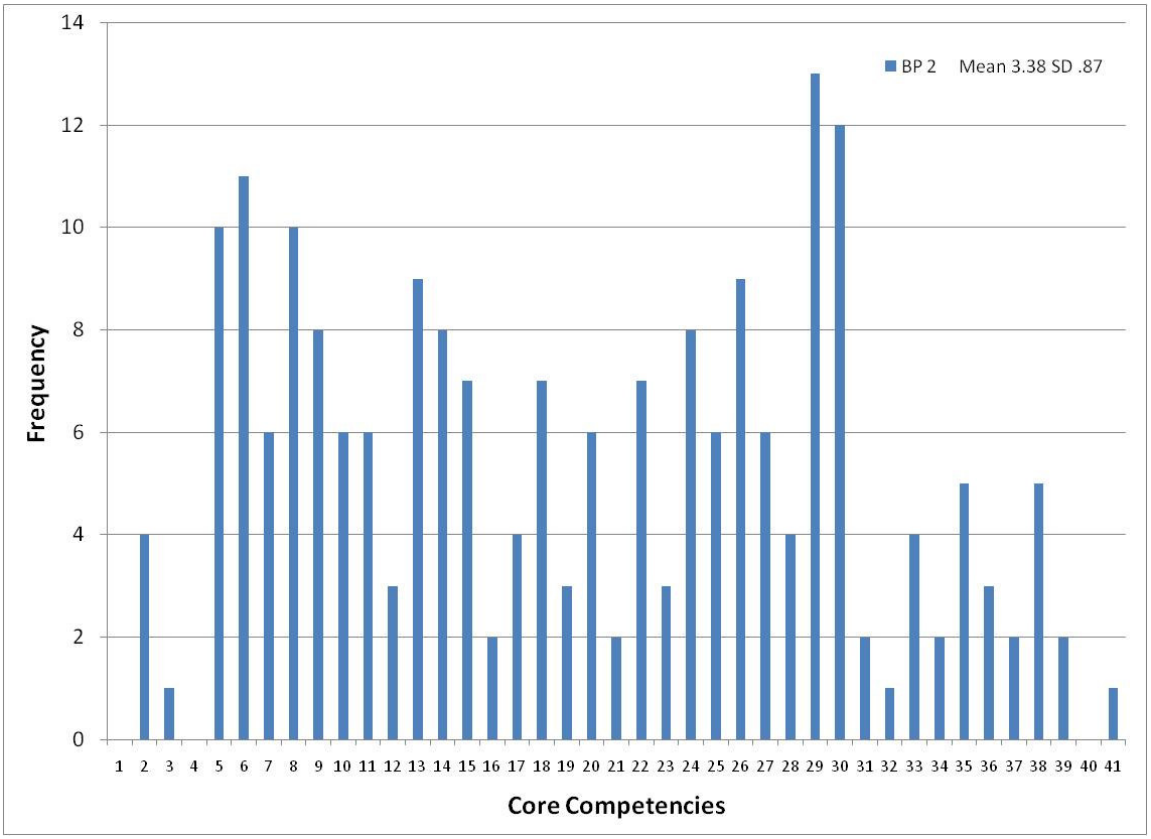

FIGURE 13. Frequency of core competencies associated with best practice 2: Examiners work in teams to review and improve item comments.

There were thirteen core competencies with at least seven responses from the panel associated with this best practice. This best practice relates to teamwork and comment writing; thus core competencies dealing with teamwork or comment writing were associated with this best practice. Additionally, the core competency dealing with examiners asking for help had seven responses.

TABLE 15. Core Competencies Associated with Best Practice 2: Examiners Work in Teams to Review and Improve Item Comments, Round 3 Results

Associated Core Competencies from Table 11 (at least 7 panelists associated these CCs with BP2)	Mean from Round 2 Results	Standard Deviation from Round 2 Results
4. Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results.	3.81	.40
5. Examiners must learn to write opportunities for improvement (OFIs).	3.81	.40
7. Examiners must learn to write strengths.	3.76	.44
8. Examiners understand the meaning of "how."	3.71	.46
12. Examiners must learn to evaluate an application in terms of A/D/L/I or Le/T/C/Li/G's.	3.62	.67
13. Examiners understand the importance of cross-references across categories.	3.58	.51
14. Examiners are willing to ask for help and receive it.	3.52	.51
17. Examiners must learn to verify the score/comment balance.	3.48	.60
21. Examiners understand the meaning of "what."	3.38	.67
23. Examiners know how to give targeted feedback comments that help the applicant move forward on its quality journey but with carefully constructed comments that are not too prescriptive.	3.38	.92
25. Examiners consolidate comments to represent the findings and score of the team.	3.33	.73
28. Examiners can function effectively as team members.	3.29	.85
29. Examiners listen to and learn from other team members.	3.24	.54
Best Practice: 2; Mean: 3.38; Standard Deviation: .86 from Round 2 results		

The third best practice is, "Examiners experience the various tasks required in the various phases of the application process." This best practice, which was added by the panel, had a Round 2 group mean of 3.20 with a standard deviation of .77. Figure 14 illustrates the frequency with which the panel members associated each core competency with this best practice. Table 16 lists the core competencies associated with this best practice.

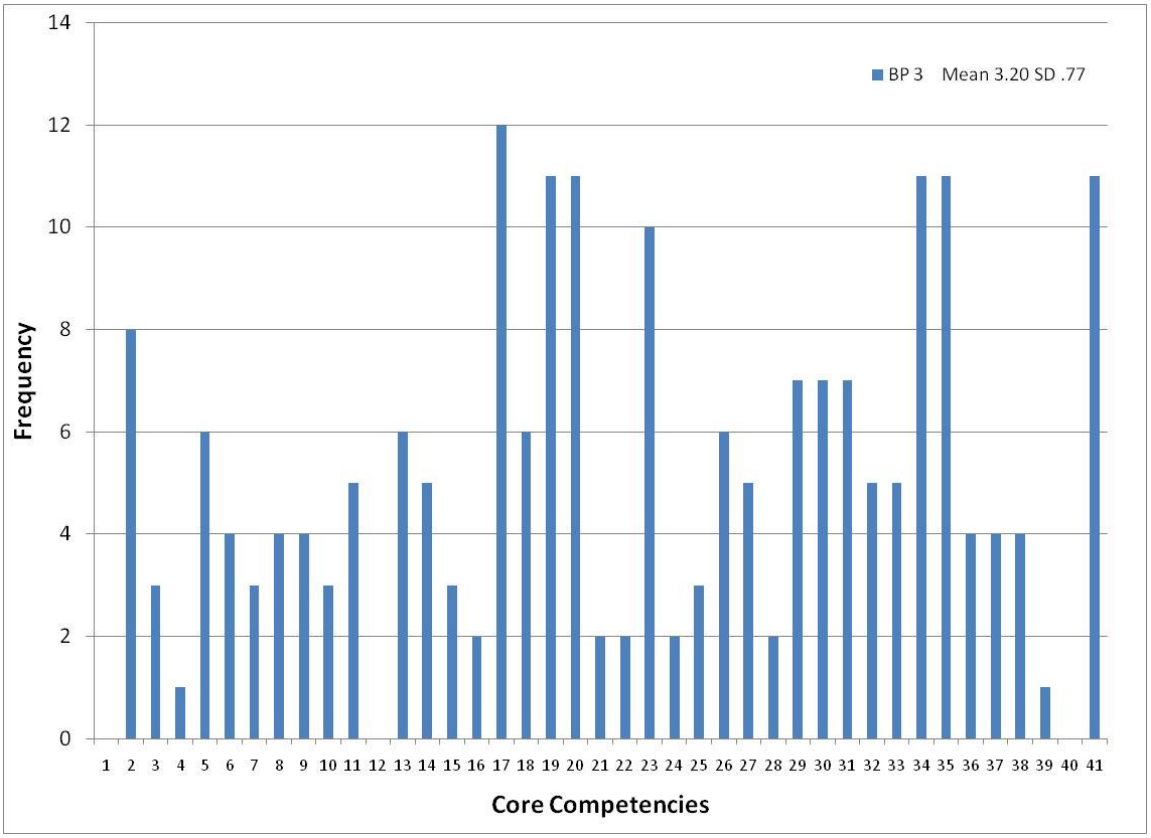

FIGURE 14. Frequency of core competencies associated with best practice 3: Examiners experience the various tasks required in the various phases of the application process.

There were eleven core competencies with at least seven responses from the panel associated with this best practice. Core competencies referring to the various phases of the evaluation process were the ones associated with this best practice. Core competencies dealing with site visits, deadlines, functioning as team members, listening to team members, understanding the Criteria structure, and developing confidence as examiners were also associated with this best practice.

TABLE 16. Core Competencies Associated with Best Practice 3: Examiners Experience the Various Tasks Required in the Various Phases of the Application Process, Round 3 Results

Associated Core Competencies from Table 11 (at least 7 panelists associated these CCs with BP2)	Mean from Round 2 Results	Standard Deviation from Round 2 Results
1. Examiners meet deadlines.	3.90	.30
16. Examiners understand a process for evaluating the application.	3.52	.81
18. Examiners understand how to complete each step of the examination process.	3.43	.60
19. Examiners need to understand the consensus process and how it affects the score.	3.43	.60
22. Examiners must understand the site visit, what it is for, how to ask questions, how to **document** findings, how those findings clarify/verify site visit issues, and how the findings should be the basis for their conclusions to resolve the site visit issues.	3.38	.74
28. Examiners can function effectively as team members.	3.29	.85
29. Examiners listen to and learn from other team members.	3.24	.54
30. Examiners must have a full understanding of the criteria structure with its subsets of Items and Areas to Address.	3.24	.70
33. Examiners understand the steps in the site visit process including how to identify site visit issues and how to develop site visit worksheets.	3.19	.93
34. Examiners leave the training with a sense of confidence in their ability to perform successfully as examiners.	3.14	.73
40. Examiners learn to prepare for site visits.	3.00	.95
Best Practice: 3; Mean: 3.20; Standard Deviation: .77 from Round 2 results		

The fourth best practice is, “Examiners learn good/bad examples of comments and key themes; they must evaluate these against the Criteria for effective comments.” Figure 15 illustrates the frequency with which the panel members associated each core competency with this best practice. Table 17 lists the core competencies associated with this best practice.

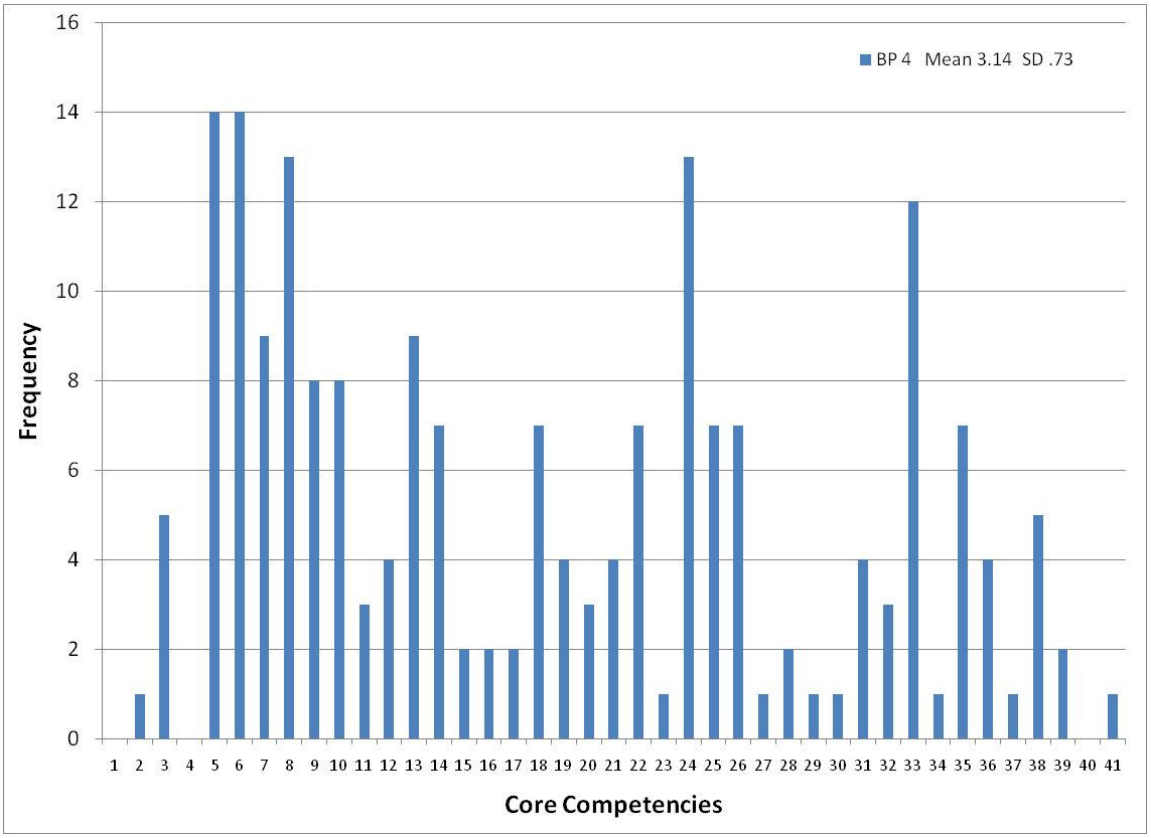

FIGURE 15. Frequency of core competencies associated with best practice 4: Examiners learn good/bad examples of comments and key themes in order to evaluate these against the criteria for effective comments.

There were fifteen core competencies with at least seven responses from the panel associated with this best practice. Core competencies dealing with comments, key themes, and the Criteria were associated with this best practice. Additionally the core competency referring to examiners developing confidence as examiners was associated with this best practice.

TABLE 17. Core Competencies Associated with Best Practice 4: Examiners Learn Good/Bad Examples of Comments and Key Themes. They Must Evaluate These Against the Criteria for Effective Comments, Round 3 Results

Associated Core Competencies from Table 11 (at least 7 panelists associated these CCs with BP2)	Mean from Round 2 Results	Standard Deviation from Round 2 Results
4. Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results.	3.81	.40
5. Examiners must learn to write opportunities for improvement (OFIs).	3.81	.40
6. Examiners must learn to relate specific key factors to Criteria items.	3.81	.51
7. Examiners must learn to write strengths.	3.76	.44
8. Examiners understand the meaning of "how."	3.71	.46
9. Examiners understand that the Criteria are non-prescriptive and adaptable.	3.71	.56
12. Examiners must learn to evaluate an application in terms of A/D/L/I or Le/T/C/Li/G's.	3.62	.67
13. Examiners understand the importance of cross-references across categories.	3.58	.51
17. Examiners must learn to verify the score/comment balance.	3.48	.60
21. Examiners understand the meaning of "what."	3.38	.67
23. Examiners know how to give targeted feedback comments that help the applicant move forward on its quality journey but with carefully constructed comments that are not too prescriptive.	3.38	.92
24. Examiners must learn to write meaningful key factors.	3.33	.66
25. Examiners consolidate comments to represent the findings and score of the team.	3.33	.73
32. Examiners must learn to write key themes.	3.19	.87
34. Examiners leave the training with a sense of confidence in their ability to perform successfully as examiners.	3.14	.73
Best Practice: 4; Mean: 3.13; Standard Deviation: .73 from Round 2 results		

The fifth best practice is, "Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a Process and a Results Item." This best practice, which was added by the panel, had a Round 2 group mean of 3.10 with a standard deviation of .94. Figure 16 illustrates the frequency with which the panel members associated each core competency with this best practice. Table 18 lists the core competencies associated with this best practice.

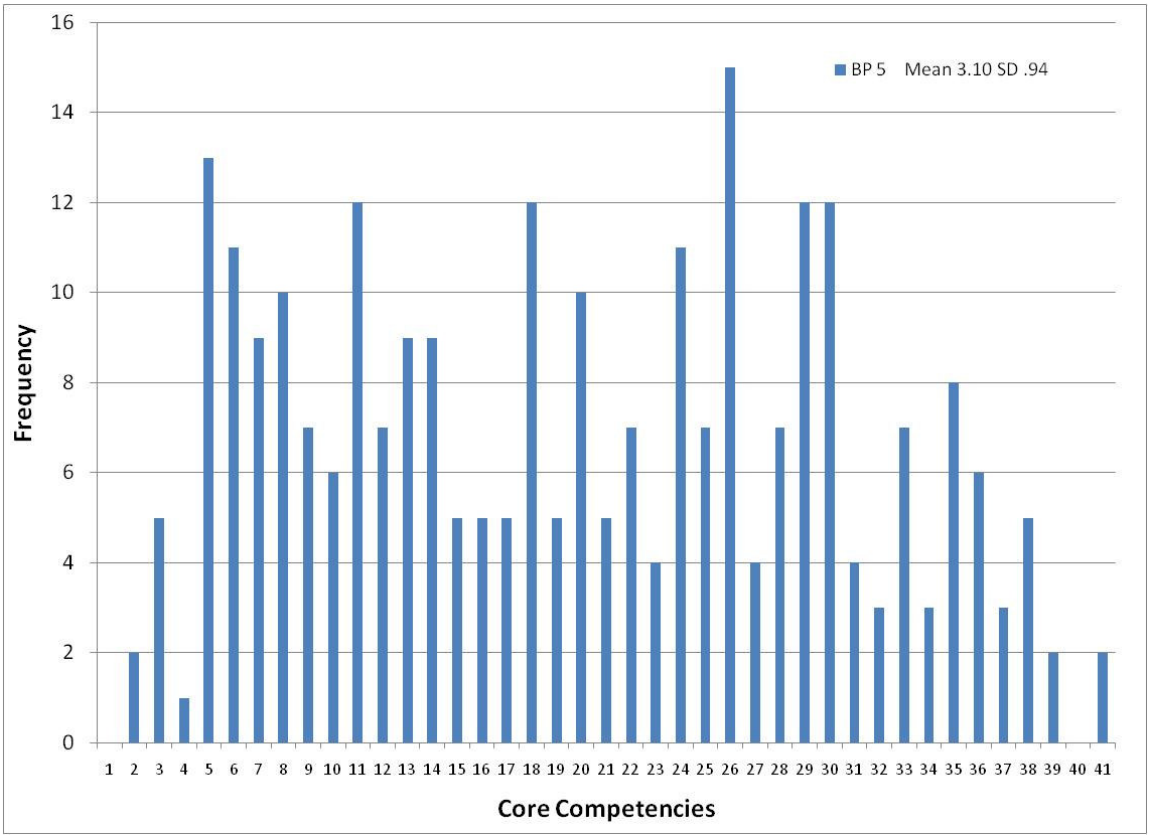

FIGURE 16. Frequency of core competencies associated with best practice 5: Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process.

There were twenty core competencies with at least seven responses from the panel associated with this best practice. Core competencies dealing with consensus, comments, key factors, key themes, cross-references, scoring, results, and developing confidence as examiners were associated with this best practice.

TABLE 18. Core Competencies Associated with Best Practice 5: Examiners Work in Teams to Review and Review Individual Comments and Scoring, Agree on the Important Strengths and OFIs, Write Comments and Reach Consensus on Scoring for a Process and a Results Item, Round 3 Results

Associated Core Competencies from Table 11 (at least 7 panelists associated these CCs with BP2)	Mean from Round 2 Results	Standard Deviation from Round 2 Results
4. Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results.	3.81	.40
5. Examiners must learn to write opportunities for improvement (OFIs).	3.81	.40
6. Examiners must learn to relate specific key factors to Criteria items.	3.81	.51
7. Examiners must learn to write strengths.	3.76	.44
8. Examiners understand the meaning of "how."	3.71	.46
10. Examiners must learn how to score within a range.	3.62	.50
11. Examiners understand that the focus in the results items is on the most critical organizational performance results.	3.62	.50
12. Examiners must learn to evaluate an application in terms of A/D/L/I or Le/T/C/Li/G's.	3.62	.67
13. Examiners understand the importance of cross-references across categories.	3.58	.51
17. Examiners must learn to verify the score/comment balance.	3.48	.60
19. Examiners need to understand the consensus process and how it affects the score.	3.43	.60
21. Examiners understand the meaning of "what."	3.38	.67
23. Examiners know how to give targeted feedback comments that help the applicant move forward on its quality journey but with carefully constructed comments that are not too prescriptive.	3.38	.92
24. Examiners must learn to write meaningful key factors.	3.33	.66
25. Examiners consolidate comments to represent the findings and score of the team.	3.33	.73
27. Examiners must have a full understanding of the role the Criteria play in the improvement of overall organizational effectiveness and capabilities.	3.33	.86
28. Examiners can function effectively as team members.	3.29	.85
29. Examiners listen to and learn from other team members.	3.24	.54
32. Examiners must learn to write key themes.	3.19	.87
34. Examiners leave the training with a sense of confidence in their ability to perform successfully as examiners.	3.14	.73
Best Practice: 5; Mean: 3.10; Standard Deviation: .94 from Round 2 results		

The sixth best practice is, “Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.” This best practice, which was added by the panel, had a Round 2 group mean of 3.00 with a standard deviation of .71. Figure 17 illustrates the frequency with which the panel members associated each core competency with this best practice. Table 19 lists the core competencies associated with this best practice.

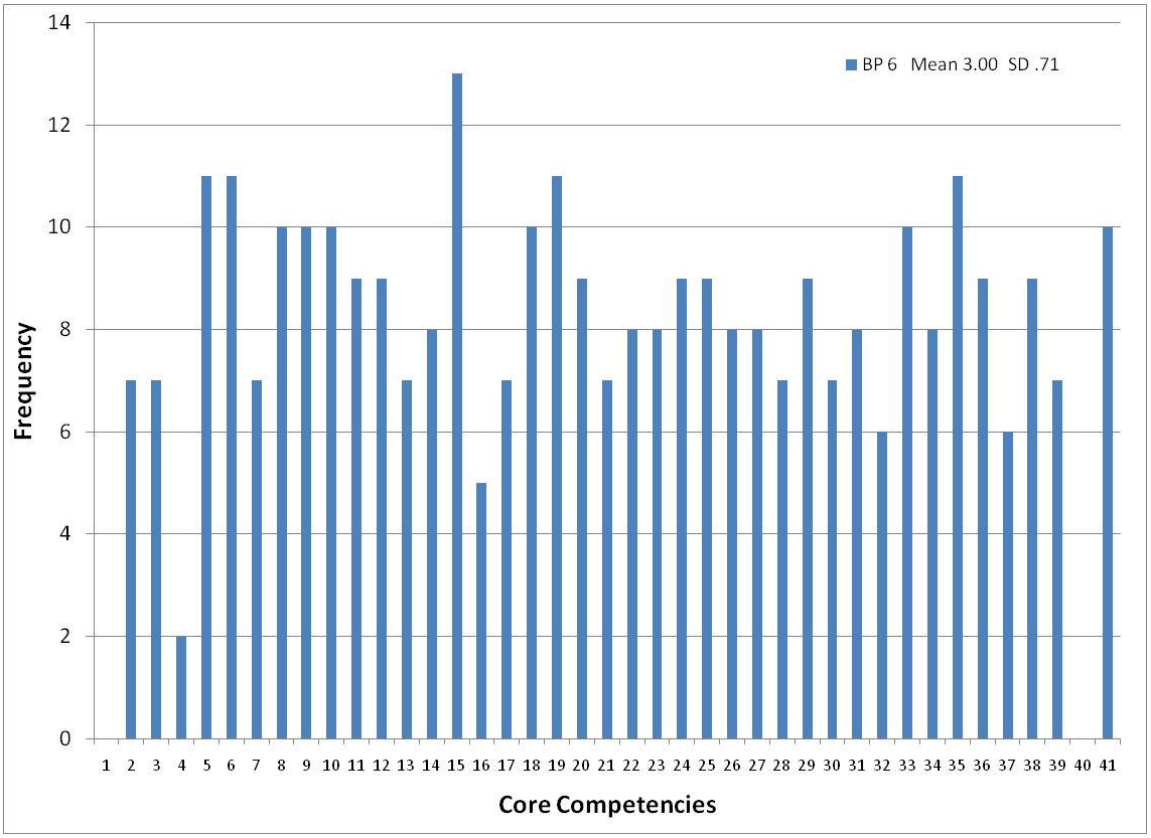

FIGURE 17. Frequency of core competencies associated with best practice 6: Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.

TABLE 19. Core Competencies Associated with Best Practice 6: Examiners Receive Coaching on Their Work as Part of Training from a Coach that Will Remain with the Team Throughout the Process, Round 3 Results

Associated Core Competencies from Table 11 (at least 7 panelists associated these CCs with BP2)	Mean from Round 2 Results	Standard Deviation from Round 2 Results
1. Examiners meet deadlines.	3.90	.30
2. Examiners must have a full understanding of the importance of the organizational profile in setting the context for the way the organization operates.	3.86	.36
4. Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results.	3.81	.40
5. Examiners must learn to write opportunities for improvement (OFIs).	3.81	.40
6. Examiners must learn to relate specific key factors to Criteria items.	3.81	.51
7. Examiners must learn to write strengths.	3.76	.44
8. Examiners understand the meaning of “how.”	3.71	.46
9. Examiners understand that the Criteria are non-prescriptive and adaptable.	3.71	.56
10. Examiners must learn how to score within a range.	3.62	.50
11. Examiners understand that the focus in the results items is on the most critical organizational performance results.	3.62	.50
12. Examiners must learn to evaluate an application in terms of A/D/L/I or Le/T/C/Li/G’s.	3.62	.67
13. Examiners understand the importance of cross-references across categories.	3.58	.51
14. Examiners are willing to ask for help and receive it.	3.52	.51
16. Examiners understand a process for evaluating the application.	3.52	.81
17. Examiners must learn to verify the score/comment balance.	3.48	.60
18. Examiners understand how to complete each step of the examination process.	3.43	.60
19. Examiners need to understand the consensus process and how it affects the score.	3.43	.60
20. Examiners understand that the Criteria support a systems perspective to maintaining organization-wide goal alignment.	3.43	.75
21. Examiners understand the meaning of “what.”	3.38	.67
22. Examiners must understand the site visit, what it is for, how to ask questions, how to **document** findings, how those findings clarify/verify site visit issues, and how the findings should be the basis for their conclusions to resolve the site visit issues.	3.38	.74
23. Examiners know how to give targeted feedback comments that help the applicant move forward on its quality journey but with carefully constructed comments that are not too prescriptive.	3.38	.92
24. Examiners must learn to write meaningful key factors.	3.33	.66
25. Examiners consolidate comments to represent the findings and score of the team.	3.33	.73
26. Examiners exhibit a sense of commitment to the process.	3.33	.80
27. Examiners must have a full understanding of the role the Criteria play in the improvement of overall organizational effectiveness and capabilities.	3.33	.86
28. Examiners can function effectively as team members.	3.29	.85
29. Examiners listen to and learn from other team members.	3.24	.54

TABLE 19. Continued

Associated Core Competencies from Table 11 (at least 7 panelists associated these CCs with BP2)	Mean from Round 2 Results	Standard Deviation from Round 2 Results
30. Examiners must have a full understanding of the criteria structure with its subsets of Items and Areas to Address.	3.24	.70
32. Examiners must learn to write key themes.	3.19	.87
33. Examiners understand the steps in the site visit process including how to identify site visit issues and how to develop site visit worksheets.	3.19	.93
34. Examiners leave the training with a sense of confidence in their ability to perform successfully as examiners.	3.14	.73
35. Examiners understand that the Criteria are complex but not complicated. That is, the Criteria are complex because they consist of several parts, which are linked holistically, but they are not complicated because they can be understood and explained.	3.14	.79
37. Examiners accurately apply "considerations for a small organization" as developed by NIST.	3.10	.62
38. Examiners must have a full understanding of the role the core values and concepts play in the Criteria.	3.10	.70
40. Examiners learn to prepare for site visits.	3.00	.95
Best Practice: 6; Mean: 3.00; Standard Deviation: .71 from Round 2 results		

There were thirty-five core competencies with at least seven responses from the panel associated with this best practice. This is by far the most responses from the panel. The panel felt that coaching is effective for nearly every core competency.

The seventh best practice is, "Examiners participate in an exercise in which each examiner synthesizes the comments of four other examiners and prepares a draft set of comments." This best practice, which was added by the panel, had a Round 2 group mean of 3.00 with a standard deviation of .84. Figure 18 illustrates the frequency with which the panel members associated each core competency with this best practice. Table 20 lists the core competencies associated with this best practice.

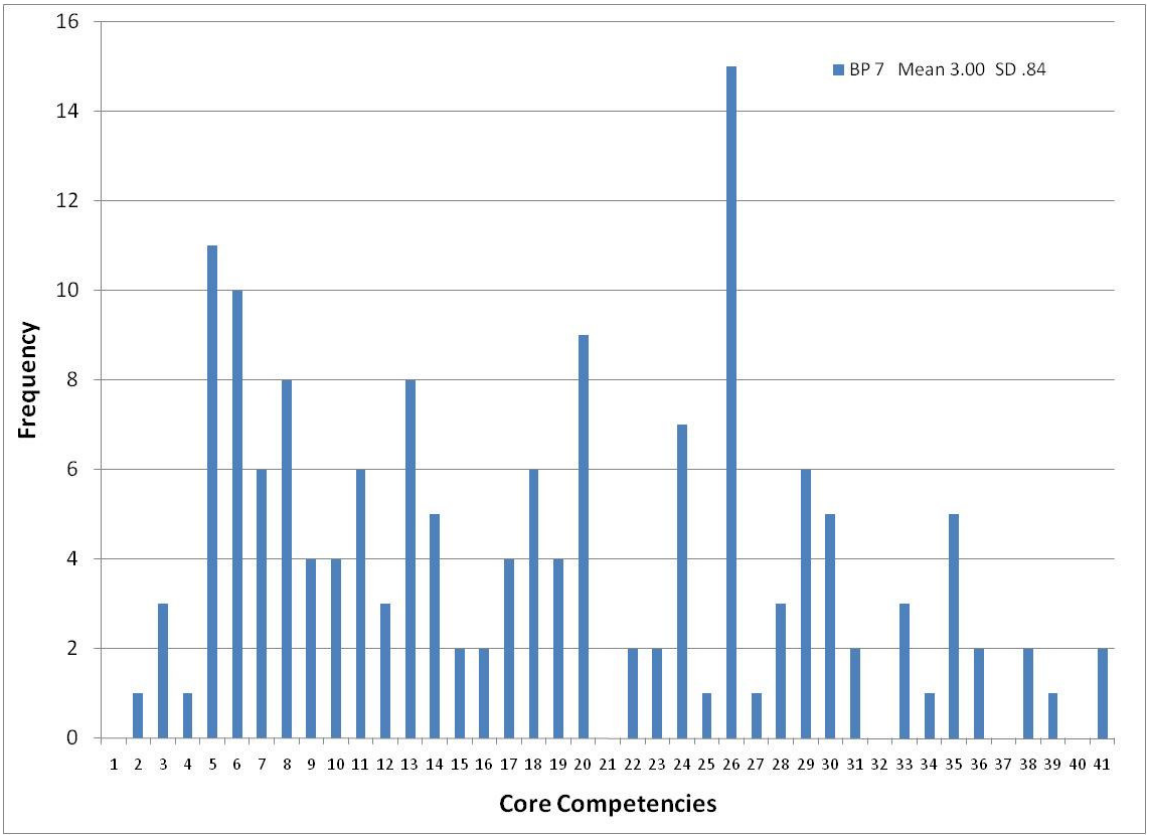

FIGURE 18. Frequency of core competencies associated with best practice 7: Examiners participate in an exercise in which each examiner synthesizes the comments of four other examiners and prepares a draft set of comments.

There were only seven core competencies with at least seven responses from the panel associated with this best practice. This is the fewest number of core competencies associated with a best practice. The reason is that this best practice is a specific exercise for synthesizing comments and is thus important for preparing examiners for consensus. The core competencies associated with this best practice relate to comments and consensus.

TABLE 20. Core Competencies Associated with Best Practice 7: Examiners Participate in an Exercise in Which Each Examiner Synthesizes the Comments of Four Other Examiners and Prepares a Draft Set of Comments, Round 3 Results

Associated Core Competencies from Table 11 (at least 7 panelists associated these CCs with BP1)	Mean from Round 2 Results	Standard Deviation from Round 2 Results
4. Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results.	3.81	.40
5. Examiners must learn to write opportunities for improvement (OFIs).	3.81	.40
7. Examiners must learn to write strengths.	3.76	.44
12. Examiners must learn to evaluate an application in terms of A/D/L/I or Le/T/C/Li/G's.	3.62	.67
19. Examiners need to understand the consensus process and how it affects the score.	3.43	.60
23. Examiners know how to give targeted feedback comments that help the applicant move forward on its quality journey but with carefully constructed comments that are not too prescriptive.	3.38	.92
25. Examiners consolidate comments to represent the findings and score of the team.	3.33	.73
Best Practice: 7; Mean: 3.00; Standard Deviation: .84 from Round 2 results		

The eighth best practice is, "Examiners learn by using a case study in training." This best practice was one of the original best practices and had a final group mean at the end of Round 2 of 3.00 with a standard deviation of 1.00. Figure 19 illustrates the frequency with which the panel members associated each core competency with this best practice. Table 21 lists the core competencies associated with this best practice.

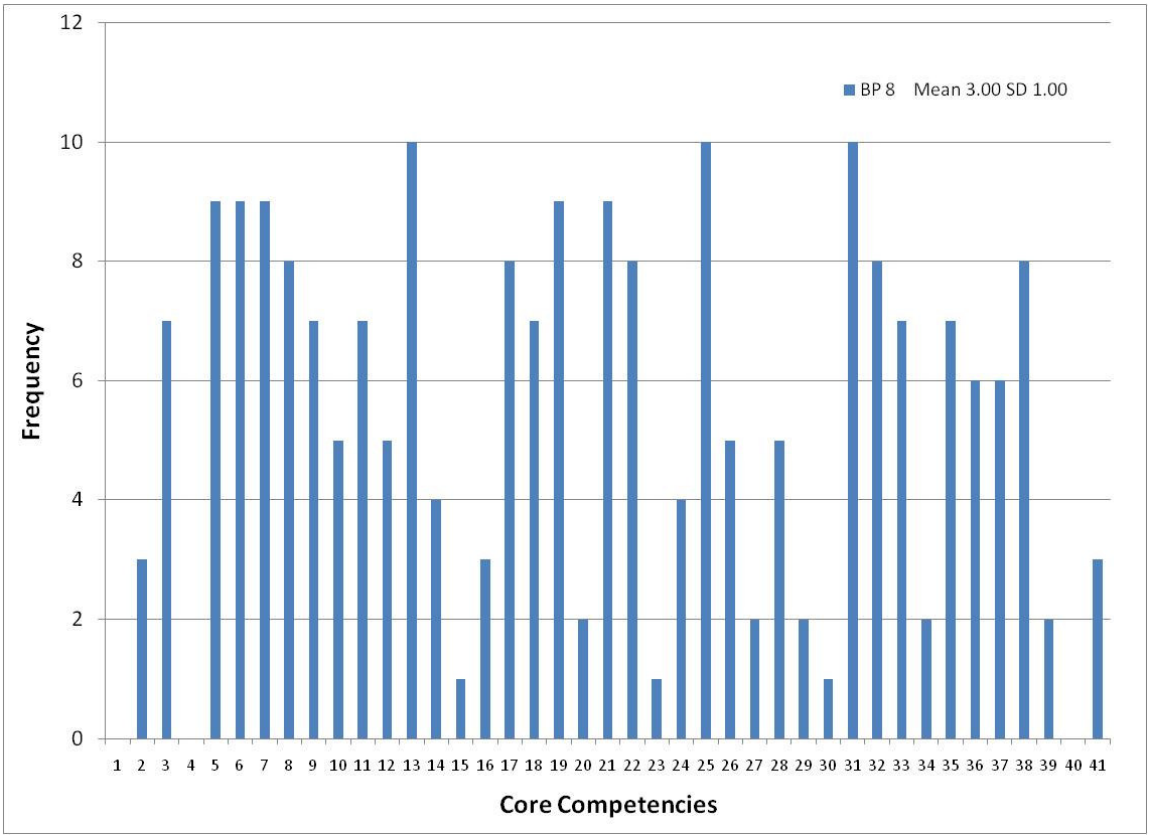

FIGURE 19. Frequency of core competencies associated with best practice 8: Examiners learn by using a case study in training.

There were nineteen core competencies with at least seven responses from the panel associated with this best practice. As noted in the previous analysis of the best practices selected for each core competency, the case study is a general teaching tool and serves as an example of the work the examiners will perform in their independent reviews. It is interesting to note that some of the panel members commented that they believe that the work from examiners not exposed to a case study is just as good as the work of those who have used the case study.

TABLE 21. Core Competencies Associated with Best Practice 8: Examiners Learn by Using a Case Study in Training, Round 3 Results

Associated Core Competencies from Table 11 (at least 7 panelists associated these CCs with BP1)	Mean from Round 2 Results	Standard Deviation from Round 2 Results
2. Examiners must have a full understanding of the importance of the organizational profile in setting the context for the way the organization operates.	3.86	.36
4. Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results.	3.81	.40
5. Examiners must learn to write opportunities for improvement (OFIs).	3.81	.40
6. Examiners must learn to relate specific key factors to Criteria items.	3.81	.51
7. Examiners must learn to write strengths.	3.76	.44
8. Examiners understand the meaning of "how."	3.71	.46
10. Examiners must learn how to score within a range.	3.62	.50
12. Examiners must learn to evaluate an application in terms of A/D/L/I or Le/T/C/Li/G's.	3.62	.67
16. Examiners understand a process for evaluating the application.	3.52	.81
17. Examiners must learn to verify the score/comment balance.	3.48	.60
18. Examiners understand how to complete each step of the examination process.	3.43	.60
20. Examiners understand that the Criteria support a systems perspective to maintaining organization-wide goal alignment.	3.43	.75
21. Examiners understand the meaning of "what."	3.38	.67
24. Examiners must learn to write meaningful key factors.	3.33	.66
30. Examiners must have a full understanding of the criteria structure with its subsets of Items and Areas to Address.	3.24	.70
31. Examiners must have a full understanding of the system operations (categories 1, 2, 3, 5, 6, and 7) and the system foundation (category 4).	3.24	.77
32. Examiners must learn to write key themes.	3.19	.87
34. Examiners leave the training with a sense of confidence in their ability to perform successfully as examiners.	3.14	.73
37. Examiners accurately apply "considerations for a small organization" as developed by NIST.	3.10	.62
Best Practice: 8; Mean: 3.00; Standard Deviation: 1.00 from Round 2 results		

In summary, coaching is the best practice which applies to nearly all core competencies. Best practices dealing with comment writing and teamwork were also favored and apply to many of the core competencies. Finally, the case study was favored as a general best practice for teaching core competencies.

In the next round, Round 4, the panelists were asked to rank the best practices for teaching each core competency in which at least ten panelists selected a best practice for teaching a core competency as found in the results of Table 13 from this section.

Round 4. Best Practices for Teaching Core Competencies

Eighteen panelists participated in this final round of the survey. Table 22 and Figure 20 show the best practices for teaching competencies with their means and standard deviations. In Table 22, the panel was asked to rank the best practices for teaching core competencies which had at least ten responses from the panel in Round 3. Table 22 contains fifty-one items, which are the pairings of best practices with core competencies where at least ten panelists paired a best practice with a core competency in Round 3. In other words, at least ten panelists deemed that particular best practice to be effective in teaching that particular core competency. The panelists were working with the eight best practices and twenty-three core competencies with means at least equal to 3.00 at the end of Round 2. Those best practices and core competencies appeared for pairing without ranking in Round 3. Finally in Round 4, the pairings which were selected by at least ten panelists appeared for ranking in Round 4 to yield the consensed best practices for teaching core competencies.

TABLE 22. Mean and Standard Deviation of Best Practices for Core Competencies, Round 4 Results

Core Competency	Best Practice	Number of Delphi Panelists who in Round 3 (Excel Matrix) checked this as a BP for this CC	Mean Round 4 Results	Standard Deviation Round 4 Results
1. Examiners understand a process for evaluating the application.	Each step of the examination process is well-defined in sequential order.	14	3.44	.70
2. Examiners learn to write opportunities for improvement (OFIs).	Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.	11	3.44	.98
3. Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results.	Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.	13	3.39	.98
4. Examiners consolidate comments to represent the findings of the team.	Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.	15	3.33	.91
5. Examiners understand a process for evaluating the application.	Examiners experience the various tasks required in the various phases of the application process.	12	3.28	.83
6. Examiners understand how to complete each step of the examination process.	Each step of the examination process is well-defined in sequential order.	14	3.28	.83
7. Examiners function effectively as team members.	Examiners work in teams to review and improve item comments.	13	3.28	.83
8. Examiners know how to give targeted feedback comments that help the applicant move forward on its quality journey but with carefully constructed comments that are not too prescriptive.	Examiners learn good/bad examples of comments and key themes in order to evaluate these against the Criteria for effective comments.	13	3.28	.96
9. Examiners listen to and learn from other team members.	Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.	12	3.28	.96

TABLE 22. Continued

Core Competency	Best Practice	Number of Delphi Panelists who in Round 3 (Excel Matrix) checked this as a BP for this CC	Mean Round 4 Results	Standard Deviation Round 4 Results
10. Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results.	Examiners learn good/bad examples of comments and key themes in order to evaluate these against the Criteria for effective comments.	14	3.28	1.02
11. Examiners learn to write strengths.	Examiners learn good/bad examples of comments and key themes in order to evaluate these against the Criteria for effective comments.	13	3.28	1.02
12. Examiners consolidate comments to represent the findings of the team.	Examiners participate in an exercise in which each examiner synthesizes the comments of four other examiners and prepares a draft set of comments.	15	3.28	1.02
13. Examiners learn to write key themes.	Examiners learn good/bad examples of comments and key themes in order to evaluate these against the Criteria for effective comments.	12	3.22	.65
14. Examiners leave with a sense of confidence in their abilities to perform successfully as examiners.	Examiners experience the various tasks required in the various phases of the application process.	11	3.22	.88
15. Examiners function effectively as team members.	Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.	12	3.22	.94
16. Examiners learn to score within a range.	Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.	12	3.22	1.00
17. Examiners listen to and learn from other team members.	Examiners work in teams to review and improve item comments.	12	3.17	.86
18. Examiners understand how to complete each step of the examination process.	Examiners experience the various tasks required in the various phases of the application process.	11	3.17	.92

TABLE 22. Continued

Core Competency	Best Practice	Number of Delphi Panelists who in Round 3 (Excel Matrix) checked this as a BP for this CC	Mean Round 4 Results	Standard Deviation Round 4 Results
19. Examiners learn to write strengths.	Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.	10	3.17	.99
20. Examiners need to understand the consensus process and how it affects the score.	Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.	10	3.17	1.04
21. Examiners learn to write opportunities for improvement (OFIs).	Examiners learn good/bad examples of comments and key themes in order to evaluate these against the Criteria for effective comments.	14	3.17	1.10
22. Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results.	Examiners work in teams to review and improve item comments.	10	3.11	.83
23. Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results.	Examiners participate in an exercise in which each examiner synthesizes the comments of four other examiners and prepares a draft set of comments.	11	3.11	.83
24. Examiners learn to verify the score/comment balance.	Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.	12	3.11	.90
25. Examiners learn to write opportunities for improvement (OFIs).	Examiners work in teams to review and improve item comments.	11	3.11	.96
26. Examiners need to understand the consensus process and how it affects the score.	Examiners experience the various tasks required in the various phases of the application process.	11	3.06	.93

TABLE 22. Continued

Core Competency	Best Practice	Number of Delphi Panelists who in Round 3 (Excel Matrix) checked this as a BP for this CC	Mean Round 4 Results	Standard Deviation Round 4 Results
27. Examiners are willing to ask for help and receive it.	Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.	13	3.06	1.00
28. Examiners know how to give targeted feedback comments that help the applicant move forward on its quality journey but with carefully constructed comments that are not too prescriptive.	Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.	11	3.00	.91
29. Examiners understand the steps in the site visit process including how to identify site visit issues and how to develop site visit worksheets.	Examiners experience the various tasks required in the various phases of the application process.	11	3.00	1.03
30. Examiners learn to prepare for site visits.	Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.	10	3.00	1.03
31. Examiners learn to write strengths.	Examiners work in teams to review and improve item comments.	10	2.94	.87
32. Examiners learn to prepare for site visits.	Examiners experience the various tasks required in the various phases of the application process.	11	2.94	.87
33. Examiners learn to prepare for site visits.	Each step of the examination process is well-defined in sequential order.	11	2.94	.94
34. Examiners learn to write opportunities for improvement (OFIs).	Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.	11	2.94	1.00
35. Examiners understand the site visit, what it is for, how to ask questions, how to document findings, how those findings clarify/verify site visit issues, and how the findings should be the basis for their conclusions to resolve the site visit issues.	Examiners experience the various tasks required in the various phases of the application process.	10	2.94	1.00
36. Examiners learn to write key themes.	Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.	10	2.94	1.11

TABLE 22. Continued

Core Competency	Best Practice	Number of Delphi Panelists who in Round 3 (Excel Matrix) checked this as a BP for this CC	Mean Round 4 Results	Standard Deviation Round 4 Results
37. Examiners learn to write opportunities for improvement (OFIs).	Examiners participate in an exercise in which each examiner synthesizes the comments of four other examiners and prepares a draft set of comments.	10	2.89	.76
38. Examiners have a full understanding of the Criteria structure with its subsets of Items and Areas to Address.	Examiners learn by using a case study in training.	10	2.89	.90
39. Examiners learn to write strengths.	Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.	10	2.89	1.02
40. Examiners understand how to complete each step of the examination process.	Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.	11	2.89	1.08
41. Examiners leave with a sense of confidence in their abilities to perform successfully as examiners.	Each step of the examination process is well-defined in sequential order.	11	2.83	.86
42. Examiners understand the site visit, what it is for, how to ask questions, how to document findings, how those findings clarify/verify site visit issues, and how the findings should be the basis for their conclusions to resolve the site visit issues.	Each step of the examination process is well-defined in sequential order.	11	2.83	.92
43. Examiners understand the steps in the site visit process including how to identify site visit issues and how to develop site visit worksheets.	Each step of the examination process is well-defined in sequential order.	11	2.83	.99
44. Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results.	Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.	11	2.78	1.06
45. Examiners leave with a sense of confidence in their abilities to perform successfully as examiners.	Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.	11	2.78	1.17
46. Examiners need to understand the consensus process and how it affects the score.	Each step of the examination process is well-defined in sequential order.	10	2.72	1.02

TABLE 22. Continued

Core Competency	Best Practice	Number of Delphi Panelists who in Round 3 (Excel Matrix) checked this as a BP for this CC	Mean Round 4 Results	Standard Deviation Round 4 Results
47. Examiners understand the meaning of "how."	Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.	10	2.72	1.07
48. Examiners understand the Criteria are non-prescriptive and adaptable.	Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.	10	2.72	1.13
49. Examiners learn to verify the score/comment balance.	Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.	10	2.72	1.13
50. Examiners learn to write meaningful key factors.	Examiners learn by using a case study in training.	10	2.61	.78
51. Examiners learn to evaluate an application in terms of A/D/L/I or Le/T/C/Li/G's.	Examiners learn by using a case study in training.	10	2.56	1.04

Ranking: **4: very effective; 3: moderately effective**; **2: minimally effective**; **1: ineffective**

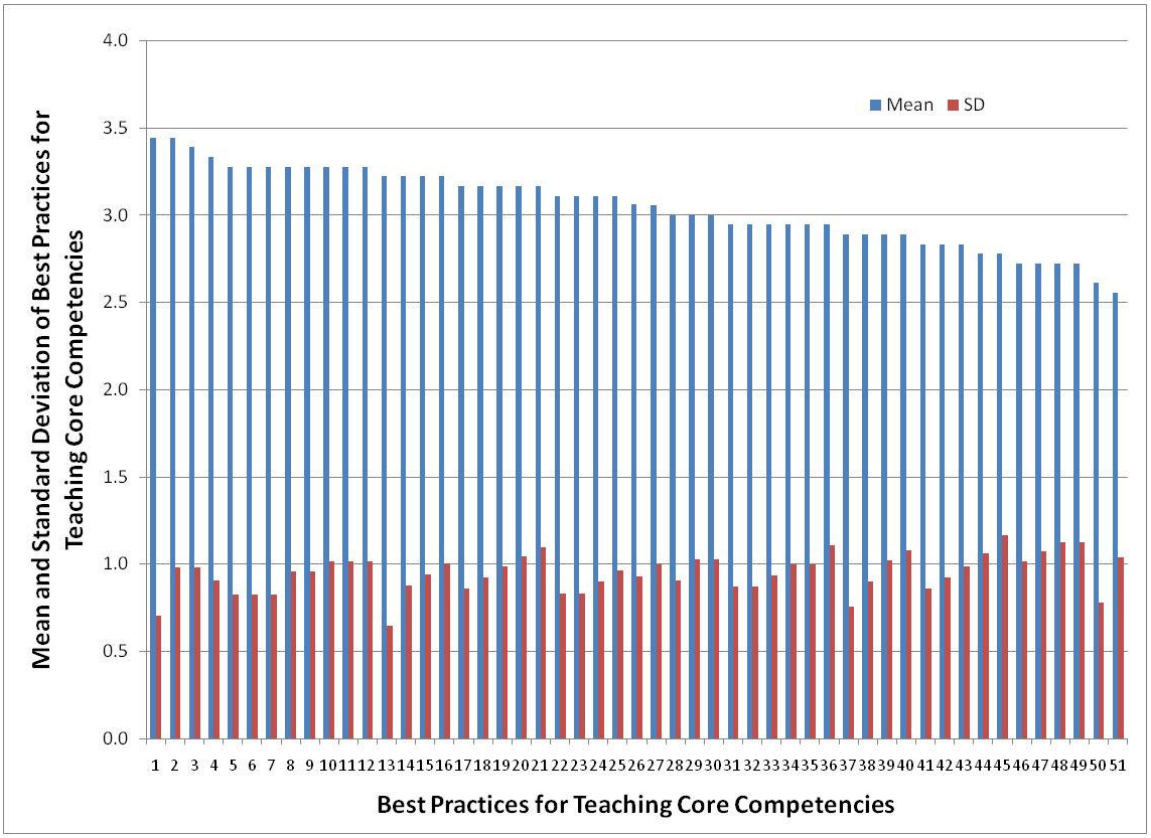

FIGURE 20. Round 4—Mean and standard deviation of best practices for teaching core competencies.

For example, Item 1 in Table 22 pairs the core competency, “Examiners understand a process for evaluating the application,” with the best practice, “Each step of the examination process is well-defined in sequential order.” Item 5 reuses the core competency from Item 1, but this time the core competency is paired with the best practice, “Examiners experience the various tasks required in the various phases of the application process.” Figure 20 graphically depicts the means and standard deviations at the end of Round 4 for the fifty-one items in Table 22. The items are displayed in order of descending means.

To be considered very effective, an item had to have a mean of at least 3.50. To be considered moderately effective an item had to have a mean between 2.50 and 3.49. To be considered minimally effective an item had to have a mean between 1.50 and 2.49. To be considered ineffective an item had to have a mean less than 1.50. All the items fell in the category of moderately effective.

Upon close examination of the data, the researcher found that two panelists gave twelve of the fifty-one items in Table 22 a ranking of 1. For ten of these items the consensus means would have changed enough for these items to be considered very effective instead of moderately effective. While it is important to remain true to the data, the researcher also notes the impact these outliers have on the results and the implications for state Baldrige training programs. Appendix K contains a table for comparison with Table 22 to show how the means shifted upward for ten items.

Whereas in Round 3 the panelists checked whether they believed a best practice was, in fact, a best practice for teaching a core competency, in this round the panelists ranked the relationship of best practices to core competencies which had at least ten responses in Round 3. The distribution of ranks is shown in Table 23. As this was the final round of the survey all the means and standard deviations were the final ones.

TABLE 23. Distribution of Ranks Best Practices for Core Competencies, Round 4 Results

Core Competency	Best Practice	Mean	SD	Number of Panelists Who Chose the Ranks Below: Rank 4	Rank 3	Rank2	Rank1
1. Examiners understand a process for evaluating the application.	Each step of the examination process is well-defined in sequential order.	3.44	.70	10	6	1	1
2. Examiners learn to write opportunities for improvement (OFIs).	Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.	3.44	.98	12	4	0	2
3. Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results.	Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.	3.39	.98	11	5	0	2
4. Examiners consolidate comments to represent the findings of the team.	Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.	3.33	.91	10	5	2	1
5. Examiners understand a process for evaluating the application.	Examiners experience the various tasks required in the various phases of the application process.	3.28	.83	8	8	1	1
6. Examiners understand how to complete each step of the examination process.	Each step of the examination process is well-defined in sequential order.	3.28	.83	8	8	1	1
7. Examiners function effectively as team members.	Examiners work in teams to review and improve item comments.	3.28	.83	8	8	1	1
8. Examiners know how to give targeted feedback comments that help the applicant move forward on its quality journey but with carefully constructed comments that are not too prescriptive.	Examiners learn good/bad examples of comments and key themes in order to evaluate these against the Criteria for effective comments.	3.28	.96	9	7	0	2
9. Examiners listen to and learn from other team members.	Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.	3.28	.96	9	7	0	2

TABLE 23. Continued

Core Competency	Best Practice	Mean	SD	Number of Panelists Who Chose the Ranks Below: Rank 4	Rank 3	Rank2	Rank1
11. Examiners learn to write strengths.	Examiners learn good/bad examples of comments and key themes in order to evaluate these against the Criteria for effective comments.	3.28	1.02	10	5	1	2
12. Examiners consolidate comments to represent the findings of the team.	Examiners participate in an exercise in which each examiner synthesizes the comments of four other examiners and prepares a draft set of comments.	3.28	1.02	10	5	1	2
13. Examiners learn to write key themes.	Examiners learn good/bad examples of comments and key themes in order to evaluate these against the Criteria for effective comments.	3.22	.65	6	10	2	0
14. Examiners leave with a sense of confidence in their abilities to perform successfully as examiners.	Examiners experience the various tasks required in the various phases of the application process.	3.22	.88	8	7	2	1
15. Examiners function effectively as team members.	Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.	3.22	.94	8	8	0	2
16. Examiners learn to score within a range.	Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.	3.22	1.00	9	6	1	2
17. Examiners listen to and learn from other team members.	Examiners work in teams to review and improve item comments.	3.17	.86	7	8	2	1
18. Examiners understand how to complete each step of the examination process.	Examiners experience the various tasks required in the various phases of the application process.	3.17	.92	8	6	3	1
19. Examiners learn to write strengths.	Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.	3.17	.99	8	7	1	2

TABLE 23. Continued

Core Competency	Best Practice	Mean	SD	Number of Panelists Who Chose the Ranks Below: Rank 4	Rank 3	Rank 2	Rank 1
20. Examiners need to understand the consensus process and how it affects the score.	Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.	3.17	1.04	9	5	2	2
21. Examiners learn to write opportunities for improvement (OFIs).	Examiners learn good/bad examples of comments and key themes in order to evaluate these against the Criteria for effective comments.	3.17	1.10	9	6	0	3
22. Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results.	Examiners work in teams to review and improve item comments.	3.11	.83	6	9	2	1
23. Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results.	Examiners participate in an exercise in which each examiner synthesizes the comments of four other examiners and prepares a draft set of comments.	3.11	.83	6	9	2	1
24. Examiners learn to verify the score/comment balance.	Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.	3.11	.90	7	7	3	1
25. Examiners learn to write opportunities for improvement (OFIs).	Examiners work in teams to review and improve item comments.	3.11	.96	7	8	1	2
26. Examiners need to understand the consensus process and how it affects the score.	Examiners experience the various tasks required in the various phases of the application process.	3.06	.93	6	7	4	1
27. Examiners are willing to ask for help and receive it.	Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.	3.06	1.00	7	7	2	2
28. Examiners know how to give targeted feedback comments that help the applicant move forward on its quality journey but with carefully constructed comments that are not too prescriptive.	Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.	3.00	.91	5	10	1	2

TABLE 23. Continued

Core Competency	Best Practice	Mean	SD	Number of Panelists Who Chose the Ranks Below: Rank 4	Rank 3	Rank 2	Rank 1
20. Examiners understand the steps in the site visit process including how to identify site visit issues and how to develop site visit worksheets.	Examiners experience the various tasks required in the various phases of the application process.	3.00	1.03	7	6	3	2
30. Examiners learn to prepare for site visits.	Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.	3.00	1.03	7	6	3	2
31. Examiners learn to write strengths.	Examiners work in teams to review and improve item comments.	2.94	.87	4	11	1	2
32. Examiners learn to prepare for site visits.	Examiners experience the various tasks required in the various phases of the application process.	2.94	.87	5	8	4	1
33. Examiners learn to prepare for site visits.	Each step of the examination process is well-defined in sequential order.	2.94	.94	6	6	5	1
34. Examiners learn to write opportunities for improvement (OFIs).	Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.	2.94	1.00	6	7	3	2
35. Examiners understand the site visit, what it is for, how to ask questions, how to document findings, how those findings clarify/verify site visit issues, and how the findings should be the basis for their conclusions to resolve the site visit issues.	Examiners experience the various tasks required in the various phases of the application process.	2.94	1.00	7	4	6	1
36. Examiners learn to write key themes.	Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.	2.94	1.11	7	6	2	3
37. Examiners learn to write opportunities for improvement (OFIs).	Examiners participate in an exercise in which each examiner synthesizes the comments of four other examiners and prepares a draft set of comments.	2.89	.76	3	11	3	1
38. Examiners have a full understanding of the Criteria structure with its subsets of Items and Areas to Address.	Examiners learn by using a case study in training.	2.89	.90	5	7	5	1

TABLE 23. Continued

Core Competency	Best Practice	Mean	SD	Number of Panelists Who Chose the Ranks Below: Rank 4	Rank 3	Rank 2	Rank 1
39. Examiners learn to write strengths.	Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.	2.89	1.02	6	6	4	2
40. Examiners understand how to complete each step of the examination process.	Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.	2.89	1.08	6	7	2	3
41. Examiners leave with a sense of confidence in their abilities to perform successfully as examiners.	Each step of the examination process is well-defined in sequential order.	2.83	.86	4	8	5	1
42. Examiners understand the site visit, what it is for, how to ask questions, how to document findings, how those findings clarify/verify site visit issues, and how the findings should be the basis for their conclusions to resolve the site visit issues.	Each step of the examination process is well-defined in sequential order.	2.83	.92	5	6	6	1
43. Examiners understand the steps in the site visit process including how to identify site visit issues and how to develop site visit worksheets.	Each step of the examination process is well-defined in sequential order.	2.83	.99	5	7	4	2
44. Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results.	Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.	2.78	1.06	5	7	3	3
45. Examiners leave with a sense of confidence in their abilities to perform successfully as examiners.	Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.	2.78	1.17	6	6	2	4
46. Examiners need to understand the consensus process and how it affects the score.	Each step of the examination process is well-defined in sequential order.	2.72	1.02	5	5	6	2
47. Examiners understand the meaning of “how.”	Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.	2.72	1.07	5	6	4	3

TABLE 23. Continued

Core Competency	Best Practice	Mean	SD	Number of Panelists Who Chose the Ranks Below: Rank 4	Rank 3	Rank 2	Rank 1
48. Examiners understand the Criteria are non-prescriptive and adaptable.	Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.	2.72	1.13	6	4	5	3
49. Examiners learn to verify the score/comment balance.	Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.	2.72	1.13	5	7	2	4
50. Examiners learn to write meaningful key factors.	Examiners learn by using a case study in training.	2.61	.78	2	8	7	1
51. Examiners learn to evaluate an application in terms of A/D/L/I or Le/T/C/Li/G's.	Examiners learn by using a case study in training.	2.56	1.04	4	5	6	3

Ranking: **4: very effective; 3: moderately effective**; **2: minimally effective**; **1: ineffective**

Item 1 asked the panel to rank the effectiveness of the best practice, “Each step of the examination process is well-defined in sequential order” in teaching the core competency, “Examiners understand a process for evaluating the application.” This item had a group mean of 3.44 with a standard deviation of .70. Ten panelists ranked this item as 4; six panelists ranked it as 3; one panelist ranked it as 2; and one panelist ranked it as 1.

Item 2 asked the panel to rank the effectiveness of the best practice, “Examiners work in teams to review individual comments and **scoring**, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item” in teaching the core competency, “Examiners learn to write opportunities for improvement (OFIs).” This item had a group mean of 3.44 with a standard deviation of .98. Twelve panelists ranked this item as 4; four panelists ranked it as 3; and two panelists ranked it as 1.

Item 3 asked the panel to rank the effectiveness of the best practice, “Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item” in teaching the core competency, “Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results.” This item had a group mean of 3.39 with a standard deviation of .98. Eleven panelists ranked this item as 4; five panelists ranked it as 3; and two panelists ranked it as 1.

Item 4 asked the panel to rank the effectiveness of the best practice, “Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item” in teaching the core competency, “Examiners consolidate comments to represent the findings of the team.” This item had a group mean of 3.33 with a standard deviation of .91. Ten panelists ranked this item as 4; five panelists ranked it as 3; two panelists ranked it as 2; and one panelist ranked it as 1.

Item 5 asked the panel to rank the effectiveness of the best practice, “Examiners experience the various tasks required in the various phases of the application process” in teaching the core competency, “Examiners understand a process for evaluating the application.” This item had a group mean of 3.28 with a standard deviation of .83. Eight panelists ranked this item as 4; eight panelists ranked it as 3; one panelist ranked it as 2; and one panelist ranked it as 1.

Item 6 asked the panel to rank the effectiveness of the best practice, “Each step of the examination process is well-defined in sequential order” in teaching the core competency, “Examiners understand how to complete each step of the examination process.” This item had a group mean of 3.28 with a standard deviation of .83. Eight panelists ranked this item as 4; eight panelists ranked it as 3; one panelist ranked it as 2; and one panelist ranked it as 1.

Item 7 asked the panel to rank the effectiveness of the best practice, “Examiners work in teams to review and improve item comments” in teaching

the core competency, “Examiners function effectively as team members.” This item had a group mean of 3.28 with a standard deviation of .83. Eight panelists ranked this item as 4; eight panelists ranked it as 3; one panelist ranked it as 2; and one panelist ranked it as 1.

Item 8 asked the panel to rank the effectiveness of the best practice, “Examiners learn good/bad examples of comments and key themes in order to evaluate these against the Criteria for effective comments” in teaching the core competency, “Examiners know how to give targeted feedback comments that help the applicant move forward on its quality journey but with carefully constructed comments that are not too prescriptive.” This item had a group mean of 3.28 with a standard deviation of .96. Nine panelists ranked this item as 4; seven panelists ranked it as 3; and two panelists ranked it as 1.

Item 9 asked the panel to rank the effectiveness of the best practice, “Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item” in teaching the core competency, “Examiners listen to and learn from other team members.” This item had a group mean of 3.28 with a standard deviation of .96. Nine panelists ranked this item as 4; seven panelists ranked it as 3; and two panelists ranked it as 1.

Item 10 asked the panel to rank the effectiveness of the best practice, “Examiners learn good/bad examples of comments and key themes in order to evaluate these against the Criteria for effective comments” in teaching the core

competency, “Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results.” This item had a group mean of 3.28 with a standard deviation of 1.02. Ten panelists ranked this item as 4; five panelists ranked it as 3; one panelist ranked it as 2; and two panelists ranked it as 1.

Item 11 asked the panel to rank the effectiveness of the best practice, “Examiners learn good/bad examples of comments and key themes in order to evaluate these against the Criteria for effective comments” in teaching the core competency, “Examiners learn to write strengths.” This item had a group mean of 3.28 with a standard deviation of 1.02. Ten panelists ranked this item as 4; five panelists ranked it as 3; one panelist ranked it as 2; and two panelists ranked it as 1.

Item 12 asked the panel to rank the effectiveness of the best practice, “Examiners participate in an exercise in which each examiner synthesizes the comments of four other examiners and prepares a draft set of comments” in teaching the core competency, “Examiners consolidate comments to represent the findings of the team.” This item had a group mean of 3.28 with a standard deviation of 1.02. Ten panelists ranked this item as 4; five panelists ranked it as 3; one panelist ranked it as 2; and two panelists ranked it as 1.

Item 13 asked the panel to rank the effectiveness of the best practice, “Examiners learn good/bad examples of comments and key themes in order to

evaluate these against the Criteria for effective comments" in teaching the core competency, "Examiners learn to write key themes." This item had a group mean of 3.22 with a standard deviation of .65. Six panelists ranked this item as 4; ten panelists ranked it as 3; and two panelists ranked it as 2.

Item 14 asked the panel to rank the effectiveness of the best practice, "Examiners experience the various tasks required in the various phases of the application process" in teaching the core competency, "Examiners leave with a sense of confidence in their abilities to perform successfully as examiners." This item had a group mean of 3.22 with a standard deviation of .88. Eight panelists ranked this item as 4; seven panelists ranked it as 3; two panelists ranked it as 2; and one panelist ranked it as 1.

Item 15 asked the panel to rank the effectiveness of the best practice, "Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item" in teaching the core competency, "Examiners function effectively as team members." This item had a group mean of 3.22 with a standard deviation of .94. Eight panelists ranked this item as 4; eight panelists ranked it as 3; and two panelists ranked it as 1.

Item 16 asked the panel to rank the effectiveness of the best practice, "Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item" in teaching the core competency,

“Examiners learn to score within a range.” This item had a group mean of 3.22 with a standard deviation of 1.00. Nine panelists ranked this item as 4; six panelists ranked it as 3; one panelist ranked it as 2; and two panelists ranked it as 1.

Item 17 asked the panel to rank the effectiveness of the best practice, “Examiners work in teams to review and improve item comments” in teaching the core competency, “Examiners listen to and learn from other team members.” This item had a group mean of 3.17 with a standard deviation of .86. Seven panelists ranked this item as 4; eight panelists ranked it as 3; two panelists ranked it as 2; and one panelist ranked it as 1.

Item 18 asked the panel to rank the effectiveness of the best practice, “Examiners experience the various tasks required in the various phases of the application process” in teaching the core competency, “Examiners understand how to complete each step of the examination process.” This item had a group mean of 3.17 with a standard deviation of .92. Eight panelists ranked this item as 4; six panelists ranked it as 3; three panelists ranked it as 2; and one panelist ranked it as 1.

Item 19 asked the panel to rank the effectiveness of the best practice, “Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item” in teaching the core competency, “Examiners learn to write strengths.” This item had a group mean of 3.17 with a

standard deviation of .99. Eight panelists ranked this item as 4; seven panelists ranked it as 3; one panelist ranked it as 2; and two panelists ranked it as 1.

Item 20 asked the panel to rank the effectiveness of the best practice, “Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item” in teaching the core competency, “Examiners need to understand the consensus process and how it affects the score.” This item had a group mean of 3.17 with a standard deviation of 1.04. Nine panelists ranked this item as 4; five panelists ranked it as 3; two panelists ranked it as 2; and two panelists ranked it as 1.

Item 21 asked the panel to rank the effectiveness of the best practice, “Examiners learn good/bad examples of comments and key themes in order to evaluate these against the Criteria for effective comments” in teaching the core competency, “Examiners learn to write opportunities for improvement (OFIs).” This item had a group mean of 3.17 with a standard deviation of 1.10. Nine panelists ranked this item as 4; six panelists ranked it as 3; and three panelists ranked it as 1.

Item 22 asked the panel to rank the effectiveness of the best practice, “Examiners work in teams to review and improve item comments” in teaching the core competency, “Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results.” This item had a group mean

of 3.11 with a standard deviation of .83. Six panelists ranked this item as 4; nine panelists ranked it as 3; two panelists ranked it as 2; and one panelist ranked it as 1.

Item 23 asked the panel to rank the effectiveness of the best practice, “Examiners participate in an exercise in which each examiner synthesizes the comments of four other examiners and prepares a draft set of comments” in teaching the core competency, “Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results.” This item had a group mean of 3.11 with a standard deviation of .83. Six panelists ranked this item as 4; nine panelists ranked it as 3; two panelists ranked it as 2; and one panelist ranked it as 1.

Item 24 asked the panel to rank the effectiveness of the best practice, “Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item” in teaching the core competency, “Examiners learn to verify the score/comment balance.” This item had a group mean of 3.11 with a standard deviation of .90. Seven panelists ranked this item as 4; seven panelists ranked it as 3; three panelists ranked it as 2; and one panelist ranked it as 1.

Item 25 asked the panel to rank the effectiveness of the best practice, “Examiners work in teams to review and improve item comments” in teaching

the core competency, “Examiners learn to write opportunities for improvement (OFIs).” This item had a group mean of 3.11 with a standard deviation of .96. Seven panelists ranked this item as 4; eight panelists ranked it as 3; one panelist ranked it as 2; and two panelists ranked it as 1.

Item 26 asked the panel to rank the effectiveness of the best practice, “Examiners experience the various tasks required in the various phases of the application process” in teaching the core competency, “Examiners need to understand the consensus process and how it affects the score.” This item had a group mean of 3.06 with a standard deviation of .93. Six panelists ranked this item as 4; seven panelists ranked it as 3; four panelists ranked it as 2; and one panelist ranked it as 1.

Item 27 asked the panel to rank the effectiveness of the best practice, “Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process” in teaching the core competency, “Examiners are willing to ask for help and receive it.” This item had a group mean of 3.06 with a standard deviation of 1.00. Seven panelists ranked this item as 4; seven panelists ranked it as 3; two panelists ranked it as 2; and two panelists ranked it as 1.

Item 28 asked the panel to rank the effectiveness of the best practice, “Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item” in teaching the core competency

“Examiners know how to give targeted feedback comments that help the applicant move forward on its quality journey but with carefully constructed comments that are not too prescriptive.” This item had a group mean of 3.00 with a standard deviation of .91. Five panelists ranked this item as 4; ten panelists ranked it as 3; one panelist ranked it as 2; and two panelists ranked it as 1.

Item 29 asked the panel to rank the effectiveness of the best practice, “Examiners experience the various tasks required in the various phases of the application process” in teaching the core competency, “Examiners understand the steps in the site visit process including how to identify site visit issues and how to develop site visit worksheets. This item had a group mean of 3.00 with a standard deviation of 1.03. Seven panelists ranked this item as 4; six panelists ranked it as 3; three panelists ranked it as 2; and two panelists ranked it as 1.

Item 30 asked the panel to rank the effectiveness of the best practice, “Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process” in teaching the core competency, “Examiners learn to prepare for site visits.” This item had a group mean of 3.00 with a standard deviation of 1.03. Seven panelists ranked this item as 4; six panelists ranked it as 3; three panelists ranked it as 2; and two panelists ranked it as 1.

Item 31 asked the panel to rank the effectiveness of the best practice, “Examiners work in teams to review and improve item comments” in teaching

the core competency, “Examiners learn to write strengths.” This item had a group mean of 2.94 with a standard deviation of .87. Four panelists ranked this item as 4; eleven panelists ranked it as 3; one panelist ranked it as 2; and two panelists ranked it as 1.

Item 32 asked the panel to rank the effectiveness of the best practice, “Examiners experience the various tasks required in the various phases of the application process” in teaching the core competency, “Examiners learn to prepare for site visits.” This item had a group mean of 2.94 with a standard deviation of .87. Five panelists ranked this item as 4; eight panelists ranked it as 3; four panelists ranked it as 2; and one panelist ranked it as 1.

Item 33 asked the panel to rank the effectiveness of the best practice, “Each step of the examination process is well-defined in sequential order” in teaching the core competency, “Examiners learn to prepare for site visits.” This item had a group mean of 2.94 with a standard deviation of .94. Six panelists ranked this item as 4; six panelists ranked it as 3; five panelists ranked it as 2; and one panelist ranked it as 1.

Item 34 asked the panel to rank the effectiveness of the best practice, “Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process” in teaching the core competency, “Examiners learn to write opportunities for improvement (OFIs).” This item had a group mean of 2.94 with a standard deviation of 1.00. Six

panelists ranked this item as 4; seven panelists ranked it as 3; three panelists ranked it as 2; and two panelists ranked it as 1.

Item 35 asked the panel to rank the effectiveness of the best practice, “Examiners experience the various tasks required in the various phases of the application process” in teaching the core competency, “Examiners understand the site visit, what it is for, how to ask questions, how to document findings, how those findings clarify/verify site visit issues, and how the findings should be the basis for their conclusions to resolve the site visit issues.” This item had a group mean of 2.94 with a standard deviation of 1.00. Seven panelists ranked this item as 4; four panelists ranked it as 3; six panelists ranked it as 2; and one panelist ranked it as 1.

Item 36 asked the panel to rank the effectiveness of the best practice, “Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process” in teaching the core competency, “Examiners learn to write key themes.” This item had a group mean of 2.94 with a standard deviation of 1.11. Seven panelists ranked this item as 4; six panelists ranked it as 3; two panelists ranked it as 2; and three panelists ranked it as 1.

Item 37 asked the panel to rank the effectiveness of the best practice, “Examiners participate in an exercise in which each examiner synthesizes the comments of four other examiners and prepares a draft set of comments in teaching the core competency, “Examiners learn to write opportunities for

improvement (OFIs).” This item had a group mean of 2.89 with a standard deviation of .76. Three panelists ranked this item as 4; eleven panelists ranked it as 3; three panelists ranked it as 2; and one panelist ranked it as 1.

Item 38 asked the panel to rank the effectiveness of the best practice, “Examiners learn by using a case study in training” in teaching the core competency, “Examiners have a full understanding of the Criteria structure with its subsets of Items and Areas to Address.” This item had a group mean of 2.89 with a standard deviation of .90. Five panelists ranked this item as 4; seven panelists ranked it as 3; five panelists ranked it as 2; and one panelist ranked it as 1.

Item 39 asked the panel to rank the effectiveness of the best practice, “Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process” in teaching the core competency, “Examiners learn to write strengths.” This item had a group mean of 2.89 with a standard deviation of 1.02. Six panelists ranked this item as 4; six panelists ranked it as 3; four panelists ranked it as 2; and two panelists ranked it as 1.

Item 40 asked the panel to rank the effectiveness of the best practice, “Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process” in teaching the core competency, “Examiners understand how to complete each step of the examination process.” This item had a group mean of 2.89 with a standard

deviation of 1.08. Six panelists ranked this item as 4; seven panelists ranked it as 3; two panelists ranked it as 2; and three panelists ranked it as 1.

Item 41 asked the panel to rank the effectiveness of the best practice, “Each step of the examination process is well-defined in sequential order” in teaching the core competency, “Examiners leave with a sense of confidence in their abilities to perform successfully as examiners.” This item had a group mean of 2.83 with a standard deviation of .86. Four panelists ranked this item as 4; eight panelists ranked it as 3; five panelists ranked it as 2; and one panelist ranked it as 1.

Item 42 asked the panel to rank the effectiveness of the best practice, “Each step of the examination process is well-defined in sequential order” in teaching the core competency, “Examiners understand the site visit, what it is for, how to ask question, ho to document findings, how those findings clarify/verify site visit issues, and how the findings should be the basis for their conclusions to resolve the site visit issues.” This item had a group mean of 2.83 with a standard deviation of .92. Five panelists ranked this item as 4; six panelists ranked it as 3; six panelists ranked it as 2; and one panelist ranked it as 1.

Item 43 asked the panel to rank the effectiveness of the best practice, “Each step of the examination process is well-defined in sequential order” in teaching the core competency, “Examiners understand the site visit process including how to develop site visit worksheets.” This item had a group mean of

2.83 with a standard deviation of .99. Five panelists ranked this item as 4; seven panelists ranked it as 3; four panelists ranked it as 2; and two panelists ranked it as 1.

Item 44 asked the panel to rank the effectiveness of the best practice, “Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process” in teaching the core competency, “Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results.” This item had a group mean of 2.78 with a standard deviation of 1.06. Five panelists ranked this item as 4; seven panelists ranked it as 3; three panelists ranked it as 2; and three panelists ranked it as 1.

Item 45 asked the panel to rank the effectiveness of the best practice, “Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process” in teaching the core competency, “Examiners leave with a sense of confidence in their abilities to perform successfully as examiners.” This item had a group mean of 2.78 with a standard deviation of 1.17. Six panelists ranked this item as 4; six panelists ranked it as 3; two panelists ranked it as 2; and four panelists ranked it as 1.

Item 46 asked the panel to rank the effectiveness of the best practice, “Each step of the examination process is well-defined in sequential order” in teaching the core competency, “Examiners need to understand the consensus

process and how it affects the score." This item had a group mean of 2.72 with a standard deviation of 1.02. Five panelists ranked this item as 4; five panelists ranked it as 3; six panelists ranked it as 2; and two panelists ranked it as 1.

Item 47 asked the panel to rank the effectiveness of the best practice, "Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process" in teaching the core competency, "Examiners understand the meaning of 'how.'" This item had a group mean of 2.72 with a standard deviation of 1.07. Five panelists ranked this item as 4; six panelists ranked it as 3; four panelists ranked it as 2; and three panelists ranked it as 1.

Item 48 asked the panel to rank the effectiveness of the best practice, "Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process" in teaching the core competency, "Examiners understand the Criteria are non-prescriptive and adaptable." This item had a group mean of 2.72 with a standard deviation of 1.13. Six panelists ranked this item as 4; four panelists ranked it as 3; five panelists ranked it as 2; and three panelists ranked it as 1.

Item 49 asked the panel to rank the effectiveness of the best practice, "Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process" in teaching the core competency, "Examiners learn to verify the score/comment balance." This item had a group mean of 2.72 with a standard deviation of 1.13. Five panelists

ranked this item as 4; seven panelists ranked it as 3; two panelists ranked it as 2; and four panelists ranked it as 1.

Item 50 asked the panel to rank the effectiveness of the best practice, “Examiners learn by using a case study in training” in teaching the core competency, “Examiners learn to write meaningful key factors.” This item had a group mean of 2.61 with a standard deviation of .78. Two panelists ranked this item as 4; eight panelists ranked it as 3; seven panelists ranked it as 2; and one panelist ranked it as 1.

Item 51 asked the panel to rank the effectiveness of the best practice, “Examiners learn by using a case study in training” in teaching the core competency, “Examiners learn to evaluate an application in terms of A/D/L/I or Le/T/C/Li/G’s.” This item had a group mean of 2.56 with a standard deviation of 1.04. Four panelists ranked this item as 4; five panelists ranked it as 3; six panelists ranked it as 2; and three panelists ranked it as 1.

In summary, these fifty-one items discussed above were the result of the pairing of the twenty-three core competencies and eight best practices which were paired in Round 3 by at least ten panelists. These pairings were ranked in Round 4. All fifty-one items were perceived as moderately effective teaching tools. The least favored best practice was the use of the case study, which is inconsistent with the literature which favors the use of a case study (Baldrige National Quality Program, 2009b). The most favored best practices were those

referring to a sequential order in teaching, the use of teamwork, and the use of examples of comments and key themes.

In terms of core competencies, evaluating an application in terms of A/D/L/I or Le/T/C/Li/G's, writing key factors, and verifying the score/comment balance were the least favored. The most favored core competencies were those which involved the learning of a process for evaluating an application and comment writing. There is consistency with the favored core competencies and the Baldrige literature (Baldrige National Quality Program, 2009b). Themes that were consistent for both core competencies and best practices were those involving teamwork and comment writing. The best practice of coaching was considered the most far reaching in its use in teaching most of the core competencies.

A more salient way to look at the results is to observe how often best practices were chosen in association with core competencies and how often core competencies were paired with best practices. Figure 21 shows the number of best practices associated with each of the core competencies in Table 22. Table 24 lists the best practices associated with each core competency. This table makes it easy to see the frequency with which best practices were chosen to teach individual core competencies. The significance of this table is that it can be referenced by trainers to teach the core competencies. The best practices for teaching each core competency are listed below each core competency making

this table a handy reference for covering the important core competencies and the techniques to do so.

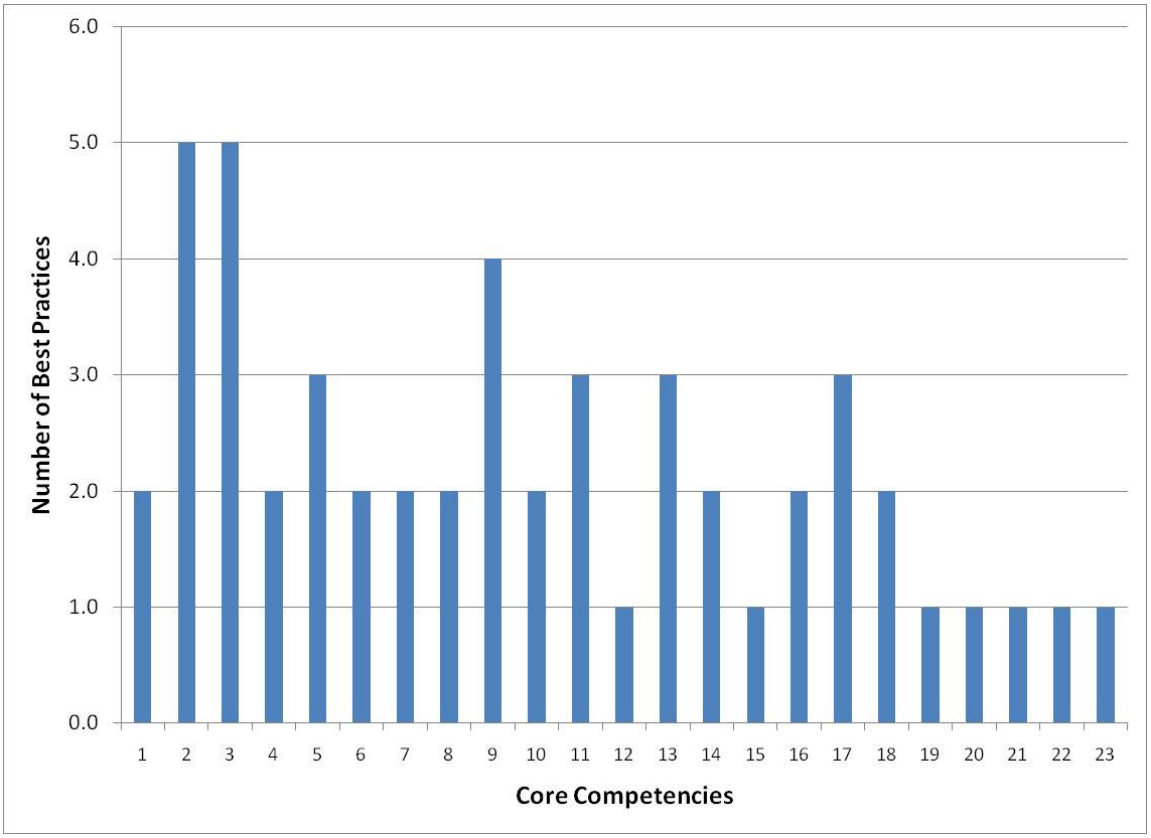

FIGURE 21. Number of best practices associated with core competencies.

TABLE 24. Association of Best Practices with Core Competencies

Core Competencies and Best Practices (with at least 10 panelists associating the best practices below to each core competency below)
CC 1. Examiners understand a process for evaluating the application.
BP 1. Each step of the examination process is well-defined in sequential order.
BP 3. Examiners experience the various tasks required in the various phases of the application process.
CC 2. Examiners learn to write opportunities for improvement (OFIs).
BP 2. Examiners work in teams to review and improve item comments.
BP 4. Examiners learn good/bad examples of comments and key themes in order to evaluate these against the Criteria for effective comments.
BP 5. Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.
BP 6. Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.
BP 7. Examiners participate in an exercise in which each examiner synthesizes the comments of four other examiners and prepares a draft set of comments.
CC 3. Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results.
BP 2. Examiners work in teams to review and improve item comments.
BP 4. Examiners learn good/bad examples of comments and key themes in order to evaluate these against the Criteria for effective comments.
BP 5. Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.
BP 6. Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.
BP 7. Examiners participate in an exercise in which each examiner synthesizes the comments of four other examiners and prepares a draft set of comments.
CC 4. Examiners consolidate comments to represent the findings of the team.
BP 5. Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.
BP 7. Examiners participate in an exercise in which each examiner synthesizes the comments of four other examiners and prepares a draft set of comments.
CC 5. Examiners understand how to complete each step of the examination process.
BP 1. Each step of the examination process is well-defined in sequential order.
BP 3. Examiners experience the various tasks required in the various phases of the application process.
BP 6. Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.
CC 6. Examiners function effectively as team members.
BP 2. Examiners work in teams to review and improve item comments.
BP 5. Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.

TABLE 24. Continued

Core Competencies and Best Practices (with at least 10 panelists associating the best practices below to each core competency below)
CC 7. Examiners know how to give targeted feedback comments that help the applicant move forward on its quality journey but with carefully constructed comments that are not too prescriptive.
BP 4. Examiners learn good/bad examples of comments and key themes in order to evaluate these against the Criteria for effective comments.
BP 5. Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.
CC 8. Examiners listen to and learn from other team members.
BP 2. Examiners work in teams to review and improve item comments.
BP 5. Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.
CC 9. Examiners learn to write strengths.
BP 2. Examiners work in teams to review and improve item comments.
BP 4. Examiners learn good/bad examples of comments and key themes in order to evaluate these against the Criteria for effective comments.
BP 5. Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.
BP 6. Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.
CC 10. Examiners learn to write key themes.
BP 4. Examiners learn good/bad examples of comments and key themes in order to evaluate these against the Criteria for effective comments.
BP 6. Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.
CC 11. Examiners leave with a sense of confidence in their abilities to perform successfully as examiners.
BP 1. Each step of the examination process is well-defined in sequential order.
BP 3. Examiners experience the various tasks required in the various phases of the application process.
BP 6. Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.
CC 12. Examiners learn to score within a range.
BP 5. Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.
CC 13. Examiners need to understand the consensus process and how it affects the score.
BP 1. Each step of the examination process is well-defined in sequential order.
BP 3. Examiners experience the various tasks required in the various phases of the application process.
BP 5. Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.
CC 14. Examiners learn to verify the score/comment balance.
BP 5. Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.
BP 6. Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.

TABLE 24. Continued

Core Competencies and Best Practices (with at least 10 panelists associating the best practices below to each core competency below)
CC 15. Examiners are willing to ask for help and receive it.
BP 6. Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.
CC 16. Examiners understand the steps in the site visit process including how to identify site visit issues and how to develop site visit worksheets.
BP 1. Each step of the examination process is well-defined in sequential order.
BP 3. Examiners experience the various tasks required in the various phases of the application process.
CC 17. Examiners learn to prepare for site visits.
BP 1. Each step of the examination process is well-defined in sequential order.
BP 3. Examiners experience the various tasks required in the various phases of the application process.
BP 6. Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.
CC 18. Examiners understand the site visit, what it is for, how to ask questions, how to document findings, how those findings clarify/verify site visit issues, and how the findings should be the basis for their conclusions to resolve the site visit issues.
BP 1. Each step of the examination process is well-defined in sequential order.
BP 3. Examiners experience the various tasks required in the various phases of the application process.
CC 19. Examiners have a full understanding of the Criteria structure with its subsets of Items and Areas to Address.
BP 8. Examiners learn by using a case study in training.
CC 20. Examiners understand the meaning of "how."
BP 6. Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.
CC 21. Examiners understand the Criteria are non-prescriptive and adaptable.
BP 6. Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.
CC 22. Examiners learn to write meaningful key factors.
BP 8. Examiners learn by using a case study in training.
CC 23. Examiners learn to evaluate an application in terms of A/D/L/I or Le/T/C/Li/G's.
BP 8. Examiners learn by using a case study in training.

Core competency 2, "Examiners learn to write opportunities for improvement (OFIs)" and core competency 3, "Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results" were both associated with five best practices, the maximum number of best practices associated with any of the core competencies. Core competency 9, "Examiners

learn to write strengths" was associated with four best practices. These three core competencies deal with comment writing, which is the focus of the initial training and the final product, which is the feedback report to the applicant. Four of the eight best practices in Table 14 deal specifically with comment writing. There is a natural pairing of core competencies and best practices related to comment writing.

Four of the core competencies had three best practices associated with them: core competency 5, "Examiners understand how to complete each step of the examination process;" core competency 11, "Examiners leave with a sense of confidence in their abilities to perform successfully as examiners;" core competency 13, "Examiners need to understand the consensus process and how it affects the score;" and core competency 17, "Examiners learn to prepare for site visits." Three of these core competencies refer to aspects of the process that include aspects after the individual review (item numbers 5, 13, and 17); one of these core competencies (item number 11) refers to the need for examiners to feel confident in their abilities.

All other core competencies were associated with only one or two of the best practices. The number of best practices associated with each core competency indicates whether best practices exist for teaching core competencies as well as how many panelists considered the teaching practices to be best practices.

Similarly, Figure 22 shows the number of core competencies associated with the best practices from Table 22. The pairings of core competencies for each best practice are found in Tables 25 through 32. These tables, like Table 24, may also have great benefit to examiner trainers in providing a template that connects best practices with core competencies that are the most important to be taught in the initial training. Best practice 6, “Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process” was the most favored of the best practices with its association with eleven of the twenty-three core competencies. Comments by panelists further support the importance of coaching as integral to the process. This is a best practice which applies to all the core competencies. The next most favored best practice was best practice 5, “Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a Process and a Results Item” with ten core competencies associated with it. This best practice deals specifically with using teams to help examiners learn comment writing, scoring, and consensus. Best practice 2, “Examiners work in teams to review and improve item comments” was one of the original best practices while best practice 5 was added by the panel and expounds on the ideas of teamwork and comment writing while adding the competency of scoring. Best practice 2, which was associated with five core competencies, can be subsumed under best practice 5.

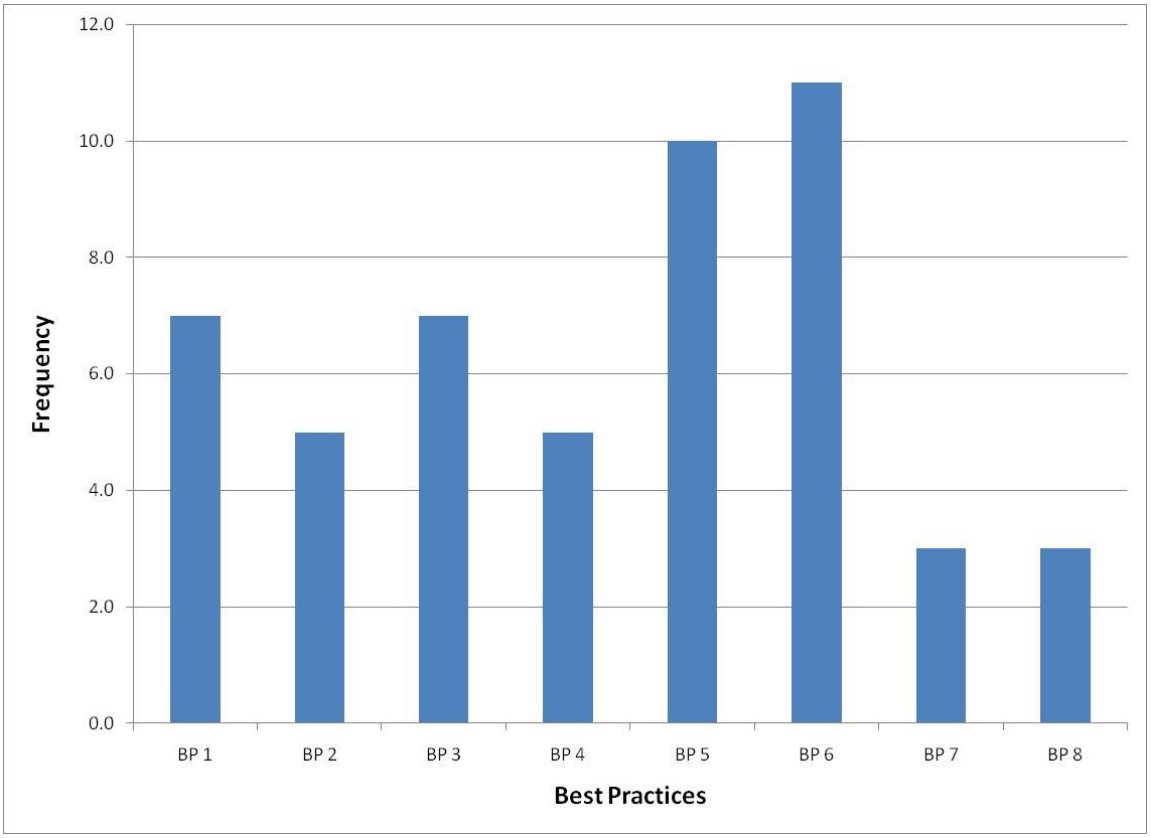

FIGURE 22. Number of core competencies associated with best practices.

TABLE 25. Core Competencies Associated with Best Practice 1: Each Step of the Examination Process is Well Defined in Sequential Order, Round 4 Results

CC 1. Examiners understand a process for evaluating the application.
CC 6. Examiners understand how to complete each step of the examination process.
CC 33. Examiners learn to prepare for site visits.
CC 41. Examiners leave with a sense of confidence in their abilities to perform successfully as examiners.
CC 42. Examiners understand the site visit, what it is for, how to ask questions, how to document findings, how those findings clarify/verify site visit issues, and how the findings should be the basis for their conclusions to resolve the site visit issues.
CC 43. Examiners understand the steps in the site visit process including how to identify site visit issues and how to develop site visit worksheets.
CC 46. Examiners need to understand the consensus process and how it affects the score.

Note: The core competencies are numbered in accordance with the item numbering in Table 22.

TABLE 26. Core Competencies Associated with Best Practice 2: Examiners Work in Teams to Review and Improve Item Comments, Round 4 Results

CC 7. Examiners function effectively as team members.
CC 17. Examiners listen to and learn from other team members.
CC 22. Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results.
CC 25. Examiners learn to write opportunities for improvement (OFIs).
CC 31. Examiners learn to write strengths.
Note: The core competencies are numbered in accordance with the item numbering in Table 22.

TABLE 27. Core Competencies Associated with Best Practice 3: Examiners Experience the Various Tasks Required in the Various Phases of the Application Process, Round 4 Results

CC 5. Examiners understand a process for evaluating the application.
CC 14. Examiners leave with a sense of confidence in their abilities to perform successfully as examiners.
CC 18. Examiners understand how to complete each step of the examination process.
CC 26. Examiners need to understand the consensus process and how it affects the score.
CC 29. Examiners understand the steps in the site visit process including how to identify site visit issues and how to develop site visit worksheets.
CC 32. Examiners learn to prepare for site visits.
CC 35. Examiners understand the site visit, what it is for, how to ask questions, how to document findings, how those findings clarify/verify site visit issues, and how the findings should be the basis for their conclusions to resolve the site visit issues.
Note: The core competencies are numbered in accordance with the item numbering in Table 22.

TABLE 28. Core Competencies Associated with Best Practice 4: Examiners Learn Good/Bad Examples of Comments and Key Themes in Order to Evaluate These Against the Criteria for Effective Comments, Round 4 Results

CC 8. Examiners know how to give targeted feedback comments that help the applicant move forward on its quality journey but with carefully constructed comments that are not too prescriptive.
CC 10. Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results.
CC 11. Examiners learn to write strengths.
CC 13. Examiners learn to write key themes.
CC 21. Examiners learn to write opportunities for improvement (OFIs).
Note: The core competencies are numbered in accordance with the item numbering in Table 22.

TABLE 29. Core Competencies Associated with Best Practice 5: Examiners Work in Teams to Review Individual Comments and Scoring, Agree on the Important Strengths and OFIs, Write Comments and Reach Consensus on Scoring for a Process and a Results Item, Round 4 Results

CC 2. Examiners learn to write opportunities for improvement (OFIs).
CC 3. Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results.
CC 4. Examiners consolidate comments to represent the findings of the team.
CC 9. Examiners listen to and learn from other team members.
CC 15. Examiners function effectively as team members.
CC 16. Examiners learn to score within a range.
CC 19. Examiners learn to write strengths.
CC 20. Examiners need to understand the consensus process and how it affects the score.
CC 24. Examiners learn to verify the score/comment balance.
CC 28. Examiners know how to give targeted feedback comments that help the applicant move forward on its quality journey but with carefully constructed comments that are not too prescriptive.

Note: The core competencies are numbered in accordance with the item numbering in Table 22.

TABLE 30. Core Competencies Associated with Best Practice 6: Examiners Receive Coaching on Their Work as Part of Training from a Coach that Will Remain with the Team Throughout the Process, Round 4 Results

CC 27. Examiners are willing to ask for help and receive it.
CC 30. Examiners learn to prepare for site visits.
CC 34. Examiners learn to write opportunities for improvement (OFIs).
CC 36. Examiners learn to write key themes.
CC 39. Examiners learn to write strengths.
CC 40. Examiners understand how to complete each step of the examination process.
CC 44. Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results.
CC 45. Examiners leave with a sense of confidence in their abilities to perform successfully as examiners.
CC 47. Examiners understand the meaning of “how.”
CC 48. Examiners understand the Criteria are non-prescriptive and adaptable.
CC 49. Examiners learn to verify the score/comment balance.

Note: The core competencies are numbered in accordance with the item numbering in Table 22.

TABLE 31. Core Competencies Associated with Best Practice 7: Examiners Participate in an Exercise in Which Each Examiner Synthesizes the Comments of Four Other Examiners and Prepares a Draft Set of Comments, Round 4 Results

CC 12. Examiners consolidate comments to represent the findings of the team.
CC 23. Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results.
CC 37. Examiners learn to write opportunities for improvement (OFIs).

Note: The core competencies are numbered in accordance with the item numbering in Table 22.

TABLE 32. Core Competencies Associated with Best Practice 8: Examiners Learn by Using a Case Study in Training, Round 4 Results

CC 38. Examiners have a full understanding of the Criteria structure with its subsets of Items and Areas to Address.
CC 50. Examiners learn to write meaningful key factors.
CC 51. Examiners learn to evaluate an application in terms of A/D/L/I or Le/T/C/Li/G's.

Note: The core competencies are numbered in accordance with the item numbering in Table 22.

Best practice 1, "Each step of the examination is well-defined in sequential order" was associated with seven core competencies. This best practice offers structure to the entire training program. Best practice 3, "Examiners experience the various tasks required in the various phases of the application process," which was also associated with seven core competencies, refers to the importance of an overview for the entire process. Best practice 4, "Examiners learn good/bad examples of comments and key themes; they must evaluate these against the Criteria for effective comments" was associated with five core competencies. This best practices deals specifically with the writing required of examiners.

The last two best practices were associated with three core competencies. Best practice 7, "Examiners participate in an exercise in which each examiner synthesizes the comments of four other examiners and prepares a draft set of comments" is a specific exercise designed to prepare examiners for the consensus process. Best practice 8, "Examiners learn by using a case study" refers to the use of a case study, which is assigned as pre-work for examiners to complete prior to the initial training. Panelists who have relinquished the use of a case study have been delightfully impressed with the

quality of feedback reports without the time-consuming preparatory work from a case study.

In summary, best practices which teach comment writing are vital. The best practice of working in teams and the best practice of coaching are also vital to the evaluation process. Best practices which give an overview of the entire process in a logical fashion are important. In contrast, the case study, which is widely used in state Baldrige organizations, was the least favored in its association with core competencies. These results lead to conclusions and recommendations which are discussed in Chapter V.

CHAPTER V

SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

This study was designed for the practical purpose of determining the core competencies needed by state Baldrige examiners, identifying best practices in state Baldrige training programs, and identifying the best practices for teaching the core competencies. This chapter provides a summary of findings, associated conclusions, and recommendations, both for practice and further research.

Summary of Findings

The key findings of this study are that the Baldrige Criteria for Performance Excellence continue to provide the core competencies which examiners need to be trained on in order to effectively evaluate an application and provide meaningful feedback to the applicant. The best practices, however, vary according to the needs of each state organization and the expertise and teaching styles of the trainers in the various state organizations. With respect to best practices for teaching the core competencies, coaching is the one best practice upon which the panel agreed as being essential and applicable to most of the core competencies. A summary of the results of each of the research questions will now be discussed.

Research Question One

What are the core competencies needed for state Baldrige examiners?

Summary of Findings for the Original Core Competencies

All of the original core competencies, which were derived from the Baldrige Criteria, achieved Delphi Panel stability in the second round. The panel consensed quickly on these core competencies. Several of these core competencies were considered essential with means at least equal to 3.5 as Table 1 and Figure 1 of Chapter IV illustrate. Core competencies related to an understanding of the Criteria and core competencies related to comment writing and scoring within a range were considered essential for examiners to know. At the lowest end of the range the core competency dealing with assigning an exact numeric score was considered helpful, but not important. There were no core competencies which the panel deemed unimportant. At the end of Round 2, which was the final round for the twenty-five original core competencies there were eleven that were considered essential, thirteen considered important, and one which was considered helpful. None of the core competencies was considered unimportant.

Discussion of the Findings for the Original Core Competencies

As the Criteria provide the framework for the evaluation process, and the original core competencies were derived from the Criteria, it affirms the process

that many of these core competencies were considered either essential or important. The speed with which these core competencies reached consensus also affirms that the panelists easily agreed on the core competencies. Comment writing and scoring within a range are essential skills for examiners to learn. However, learning to assign a numeric score was not considered important. Yet examiners do assign a numeric score during their independent reviews. If it is not important for them to learn to assign a numeric score in the initial training then should this skill continue to be required in the independent review? Plunkett (2006) found that independent examiners were more lenient when looking at the organization as a whole and more critical in their item scores than the team consensus.

Summary of Findings for the Added Core Competencies

Of the twenty-six core competencies added by the panel only four were deemed essential by the end of Round 4 after having been introduced in Round 2 (Tables 4 and 5 and Figures 4 and 5, Chapter IV). Twenty core competencies were considered important, and two competencies were considered helpful. None of the core competencies was considered unimportant. This set of core competencies came from the panel members' learning styles and experiences. After three rounds of ranking only the core competency asking examiners to learn to prepare for site visits was still unstable.

The essential core competencies from this set refer to examiners' abiding by the Conflict of Interest and Code of Conduct rules, meeting deadlines, writing comments, and being committed to the process. At the other end of the ranking, identifying best practices and getting a glimpse of the judging process were considered helpful but not important.

Discussion of the Added Core Competencies

As essential as it is for examiners to abide by the Conflict of Interest and Code of Conduct rules and to meet deadlines, these are core competencies that relate to examiners' sense of ethics and commitment. These are not teachable skills in the same way as comment writing. Because comment writing is so essential, the panel added more core competencies related to comment writing in addition to the ones in the original core competencies. The next section discusses the difference in the conclusions between the original core competencies and those added by the panel.

Discussion of the Differences between Results for the Original and the Added Core Competencies

The original core competencies came from the Baldrige Criteria. These were selected with the focus on the initial training prior to the individual review. The core competencies added by the panel were based on the personal learning styles and experiences of the panel members. Many of these core competencies refer to skills needed after the individual review such as preparation for the site

visit. Because the Criteria form the structure of the state training programs, the original core competencies derived from the Criteria had many core competencies considered essential and all reached stability in two rounds. In contrast, the core competencies added by the panel had fewer ones which were considered essential while most were considered important with some taking three rounds to achieve stability and one failing to reach stability by the end of the fourth and final round. These core competencies lack the familiarity of the original ones derived from the Criteria. While the core competencies added by the panel may be very important to some of the state Baldrige organizations, they did not as a whole achieve the same level of essentiality as the original core competencies. Another way to examine the results is to combine the original and added core competencies, which is what the next section discusses.

Summary of Findings from a Synthesis of the Original and Added Core Competencies

Perhaps the most useful way of assessing which core competencies are needed by examiners is to consider them grouped in the following eight categories based on a content analysis of the core competencies: Criteria, comments, evaluation, score, results, key factors and key themes, non-teachable core competencies, and post-independent review. It is worth noting that nearly all the core competencies were considered either essential (with a

final group mean at least equal to 3.50) or important (with a final group mean between 2.50 and 3.50).

Table 33 lists the core competencies related to the Criteria in descending order by final group mean. Only the last item was added by the panel with all the preceding items being part of the original core competencies which were based on the Criteria. The first two items were considered essential and the rest were considered important. The Criteria are the framework providing the structure within which applicants explain their performance improvement. In order to effectively evaluate and score applications, examiners need a firm grasp of the Criteria. With the exception of the first item which addresses an application for examiners to learn, the rest of the Criteria core competencies refer to an understanding of the Criteria. It is important for examiners to understand the Criteria, and it is essential that examiners know the Criteria are non- prescriptive and adaptable and that examiners are able to relate organizational factors to Criteria items.

TABLE 33. Criteria Core Competencies

Criteria Core Competencies	Final Mean	Final Standard Deviation	Original CC	Added CC
Examiners must learn to relate specific key factors to Criteria items.	3.81	.51	X	
Examiners understand that the Criteria are non-prescriptive and adaptable.	3.71	.56	X	
Examiners understand that the Criteria support a systems perspective to maintaining organization-wide goal alignment.	3.43	.75	X	
Examiners must have a full understanding of the role the Criteria play in the improvement of overall organizational effectiveness and capabilities.	3.33	.86	X	
Examiners must have a full understanding of the criteria structure with its subsets of Items and Areas to Address.	3.24	.70	X	
Examiners must have a full understanding of the role that the Criteria play in contributing value to customers and stakeholders and organizational sustainability.	3.14	.96	X	
Examiners must have a full understanding of the role the core values and concepts play in the Criteria.	3.10	.70	X	
Examiners understand that the Criteria are complex but not complicated. That is, the Criteria are complex because they consist of several parts, which are linked holistically, but they are not complicated because they can be understood and explained.	3.00	.75		X
Examiners must have a full understanding of the role the Criteria play in organizational and personal learning.	2.95	.87	X	
Examiners understand that the Criteria support goal-based diagnosis.	2.86	.73	X	
Examiners understand how to apply the terms in the Glossary of Key Terms.	2.86	.79	X	

Ranking: **4: essential, 3: important,** but not essential, **2: helpful,** but not important, **1: unimportant,** should not be included

Table 34 lists the core competencies related to comment writing. Half of these items were considered essential and the others were considered important. This set of competencies deals with concrete skills taught during examiner training, the focus of which is training examiners to evaluate and score applications in their independent reviews. Comment writing forms the bulk of the

independent evaluation. Comment writing is a critical core competency in which examiners must be thoroughly trained. Training programs can incorporate any of the core competencies in this set as needed.

TABLE 34. Comment Core Competencies

Comment Core Competencies	Final Mean	Final Standard Deviation	Original CC	Added CC
Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results.	3.94	.24		X
Examiners must learn to write opportunities for improvement (OFI's).	3.81	.40	X	
Examiners must learn to write strengths.	3.76	.44	X	
Examiners know how to give targeted feedback comments that help the applicant move forward on its quality journey but with carefully constructed comments that are not too prescriptive.	3.32	.95		X
Examiners know how to adapt their experience and sector knowledge to the applicant's sector as they give feedback comments.	3.05	.52		X
Examiners learn to include "so whats" for both strengths and OFI's.	2.89	.74		X

Ranking: **4: essential, 3: important,** but not essential, **2: helpful,** but not important, **1: unimportant,** should not be included

Table 35 lists the core competencies related to the evaluation of an application. This set has a good balance between original core competencies and added core competencies. All except one core competency was considered either essential or important. The only core competency considered helpful was requiring examiners to learn to identify best practices in an application. There are a variety of core competencies in this set which state Baldrige organizations may find useful in examiner training such as teaching examiners the importance

of cross-references across categories, which the Delphi Panel deemed essential.

TABLE 35. Evaluation Core Competencies

Evaluation Core Competencies	Final Mean	Final Standard Deviation	Original CC	Added CC
Examiners must have a full understanding of the importance of the organizational profile in setting the context for the way the organization operates.	3.81	.40	X	
Examiners understand the meaning of "how."	3.71	.46	X	
Examiners must learn to evaluate an application in terms of A/D/L/I or Le/T/C/Li/G's.	3.62	.67	X	
Examiners understand the importance of cross-references across categories.	3.58	.51	X	
Examiners understand a process for evaluating the application.	3.42	.51		X
Examiners understand the meaning of "what."	3.38	.67	X	
Examiners understand how to complete each step of the examination process.	3.37	.60		X
Examiners must have a full understanding of the system operations (categories 1, 2, 3, 5, 6, and 7) and the system foundation (category 4).	3.24	.77	X	
Examiners understand common terminology used during training and the examination process that may not appear in the Criteria glossary.	3.16	.60		X
Examiners leave the training with a sense of confidence in their ability to perform successfully as examiners.	3.11	.47		X
Examiners accurately apply "considerations for a small organization" as developed by NIST. (See attached.)	3.00	.47		X
Examiners fully understand the entire award process.	2.68	.58		X
Examiners know how to redefine their assessment approach and feedback comments (the learning from training focuses on Award level assessment) to writing comments at other levels of applications (i.e. Level 1 or Level 2 application criteria).	2.53	.96		X
Examiners learn to identify best practices.	2.37	.68		X

Ranking: **4: essential, 3: important,** but not essential, **2: helpful,** but not important, **1: unimportant,** should not be included

Table 36 lists the two core competencies related to results. Both of these were included in the original set of core competencies and both were considered essential.

TABLE 36. Results Core Competencies

Results Core Competencies	Final Mean	Final Standard Deviation	Original CC	Added CC
Examiners understand that the focus in the results items is on the most critical organizational performance results.	3.62	.50	X	
Examiners understand that the Criteria focus on results.	3.52	.68	X	

Ranking: **4: essential, 3: important,** but not essential, **2: helpful,** but not important, **1: unimportant,** should not be included

Table 37 lists core competencies related to the score. Plunkett (2006) studied examiners' scoring to determine scoring stability. She found that consistency in scoring had increased over time and attributed this result to more effective examiner training. Of the four core competencies in this set, the first three were considered important or essential. The core competency requiring examiners to assign an exact numeric score was considered helpful. This is noteworthy because the winner of the Award is based on the highest number of points.

Table 38 lists the core competencies related to key factors and key themes, both of which were considered important. As examiner training programs already address these skills, this category simply reflects an ongoing practice.

TABLE 37. Score Core Competencies

Score Core Competencies	Final Mean	Final Standard Deviation	Original CC	Added CC
Examiners must learn how to score within a range.	3.62	.50	X	
Examiners must learn to verify the score/comment balance.	3.48	.60	X	
Examiners need to identify only the scoring band for consensus.	2.56	.86		X
Examiners must learn how to assign an exact numeric score.	2.38	.97	X	

Ranking: **4: essential, 3: important,** but not essential, **2: helpful,** but not important, **1: unimportant,** should not be included

TABLE 38. Key Factors and Key Themes Core Competencies

Key Factors and Key Themes Core Competencies	Final Mean	Final Standard Deviation	Original CC	Added CC
Examiners must learn to write meaningful key factors.	3.33	.66	X	
Examiners must learn to write key themes.	3.19	.88	X	

Ranking: **4: essential, 3: important,** but not essential, **2: helpful,** but not important, **1: unimportant,** should not be included

Table 39 lists non-teachable core competencies, all of which were added by the Delphi Panel and all of which were deemed important or essential. In fact, the only core competency of the entire set of core competencies which had a final group mean of 4.00 is the first one in this set. As critical as these core competencies are they may be discussed during training, but these are not teachable skills in the same way that comment writing is a teachable skill.

Table 40 lists core competencies that examiners need after they finish their independent reviews. Some of these core competencies relate to the consensus visit and some relate to the site visit. The last one, and the only one considered helpful instead of important, relates to the judging process.

TABLE 39. Non-teachable Core Competencies

Non-teachable Core Competencies	Final Mean	Final Standard Deviation	Original CC	Added CC
Examiners abide by Conflict of Interest and Code of Conduct rules.	4.00	.00		X
Examiners meet deadlines.	3.89	.32		X
Examiners exhibit a sense of commitment to the process.	3.56	.51		X
Examiners are willing to ask for help and receive it.	3.47	.51		X
Examiners can function effectively as team members.	3.32	.67		X
Examiners listen to and learn from other team members.	3.00	.47		X

Ranking: **4: essential, 3: important,** but not essential, **2: helpful,** but not important, **1: unimportant,** should not be included

TABLE 40. Post Independent Review Core Competencies

Post Independent Review Core Competencies	Final Mean	Final Standard Deviation	Original CC	Added CC
Examiners need to understand the consensus process and how it affects the score.	3.42	.51		X
Examiners consolidate comments to represent the findings and score of the team.	3.37	.60		X
Examiners must understand the site visit, what it is for, how to ask questions, how to **document** findings, how those findings clarify/verify site visit issues, and how the findings should be the basis for their conclusions to resolve the site visit issues.	3.37	.83		X
Examiners understand the steps in the site visit process including how to identify site visit issues and how to develop site visit worksheets.	3.26	.81		X
Examiners learn to prepare for site visits.	3.21	.86		X
Examiners get a glimpse of the judging process so that they understand the effect of their work.	2.11	.57		X

Ranking: **4: essential, 3: important,** but not essential, **2: helpful,** but not important, **1: unimportant,** should not be included

Discussion of the Synthesis of the Original and the Added Core Competencies

Core competencies relating to the Criteria are numerous and have high ranks. The Criteria provide the backbone around which applicants build their

applications and examiners evaluate the applications. It is noteworthy that the highest ranking core competency in this group is one in which examiners gain the practical knowledge of relating the applicant's key factors to the Criteria. There is an interrelationship between the application and the Criteria which examiners must glean both theoretically and practically.

The second category of core competencies is that of comments. Comments from the bulk of the feedback report to the applicant. Comment writing is the primary focus of the initial training. The core competencies contributed by the panel add specificity and breadth to the two original core competencies. As one of the added core competencies explained, targeted feedback comments help the applicant move forward on its quality journey. The concept of continuing performance improvement is at the core of the Baldrige philosophy. The comments to the applicant are the tools to help the applicant improve.

The next category of evaluation core competencies covers numerous aspects of the evaluation process in addition to the categories of comment writing, scoring, key factors, and key themes which are covered separately in this analysis. The evaluation category offers a wide range of core competencies which examiners need in order to evaluate an application.

There were several core competencies deemed essential in this category. An examiner's ability to master these essential core competencies as well as those deemed important will insure a sound evaluation for the applicant. The

one core competency which was considered helpful instead of important or essential like the other core competencies refers to having examiners learn to identify best practices in an application. The presence of best practices in an application depends on the applicant's maturity within the Baldrige process. An application may not contain any best practices.

The two core competencies dealing with results were both from the original core competencies and both were deemed essential. Results drive the processes and sound processes lead to excellent results. The driving force behind the Baldrige organization was to improve results. Results are a key element in an application. Failure to show improvement without valid justification negates the value of the processes. In other words, when well-designed processes are in place, positive results follow.

There were a few core competencies in the category of scoring. Those core competencies related to scoring within a range had higher means than the competency derived from the Criteria, which specifies that examiners assign an exact numeric score. At what point do examiners learn to assign a numeric score? Are there variations in scoring between teams? (Plunkett, 2006). Given the critical nature of an exact numeric score to the Award and the relative lack of emphasis on it in examiner training, this polarity raises questions with regard to the nature of scoring. The Criteria specify the assignment of a numeric score.

The category of key factors and key themes contains one core competency for key factors and one for key themes. Both of these were in the

original core competencies and both were deemed important. At the outset of the evaluation, examiners peruse the organizational profile to learn what is most important to the applicant. These are the key factors, which appear throughout the rest of the application. After examiners finish writing comments, key themes emerge from the comments either because of the importance of a comment or because a theme appeared across several categories. While the panelists agreed on the importance of these two core competencies they did not offer any additional ones as they did for comment writing.

All of the non-teachable core competencies were added by the panel and were deemed either essential or important. They were categorized as non-teachable because they have more to do with personality, behavior, and ethics than with a teachable skill such as comment writing. Even though they are non-teachable skills, these core competencies are integral to the evaluation. For example, the consensus phone call cannot begin until all examiners are present. This example illustrates the importance of meeting deadlines.

The panelists contributed several core competencies directed at consensus and site visit which occur after the initial independent review. For example, consolidating comments to reflect the team's findings and score was considered important. There were several suggested core competencies regarding the site visit, which occurs after the consensus process. The panelists recognized the importance of introducing the consensus process and the site visit process during the initial training so that examiners will be well-prepared for

the entire process. The question becomes what is needed during the initial examiner training to give examiners the overview they need to understand the entire process and more effectively perform their independent reviews. There is variation among the state Baldrige programs regarding subsequent training sessions. Each state organization can use this set of core competencies according to its training for the various phases of the award evaluation process.

Conclusions for Research Question One: Core Competencies

Research question one asks what the core competencies needed for state Baldrige examiners are. The fundamental conclusion is that examiners must understand the Criteria and be able to turn it into meaningful, actionable feedback for the applicants. In other words, the value of a core competency depends on the link between the Criteria and the applicant. Examiners learn to write feedback reports in a way that the applicant can understand and apply.

While the fundamental conclusion from the results is stated above, the results also show that there are three categories of conclusions for the initial training sessions for state Baldrige examiners: Some core competencies are teachable; some are non-teachable; and some relate to post independent review processes even though the initial training precedes the independent review and is focused on that.

The non-teachable and the post-independent review core competencies were all added by the panel. While some of these are referred to in the Criteria,

they were omitted from the original list because either they are not teachable skills or they refer to processes which occur after the independent review. There were two core competencies regarding teamwork. Consequently, working in teams should weigh heavily as a skill examiners must acquire.

With respect to what core competencies are needed, the conclusions based on the results to the first research question for the teachable core competencies are the following categories of core competencies.

1. Examiners need to understand and apply the Criteria (Table 33).
2. Examiners need to learn how to write effective comments (Table 34).
3. Examiners need to learn how to evaluate applications (Table 35).
4. Examiners need to understand the role of organizational results (Table 36).
5. Examiners need to learn how to score (Table 37).
6. Examiners need to learn how to write key factors and key themes (Table 38).

Conclusions 1 and 5 align with Lehr and Rice's (2002) findings that the focus of training is on the Criteria and scoring. Conclusion 4 aligns with Vokurka's (2001) explanation that the award process has changed to place increasing weight on the results. While the numeric score was deemed helpful but not important and the individual scores are replaced by consensus scores, the conclusion is that during the independent review all that is required of examiners is the band width scores.

While the non-teachable core competencies are also important (Table 39), as they involve non-teachable skills, it may be more difficult to inculcate them. Based on the value of the post-independent review core competencies (Table 40), the conclusion is that instructions about the consensus process and site visits are important in the initial training.

Recommendations for the Field

- The focus of the training should be on teachable core competencies with some time devoted to non-teachable core competencies and post-independent review core competencies.
- Examiners should score within a band until the consensus process, at which time the team assigns a numeric score.

Recommendations for Further Study

- Further study should be conducted to determine whether there is a way to inculcate the non-teachable core competencies.
- Further study should be conducted to determine to what extent the post-independent review processes should be taught in the initial training.
- Further study should be conducted to determine when numeric scoring should be taught to insure minimal variation among teams in scoring (Plunkett, 2006).

Research Question Two

What are the best practices in examiner training programs provided by state Baldrige organizations?

Summary of Findings for the Original Best Practices

Like the original core competencies all of the original best practices reached consensus by the end of Round 2. None of these best practices was deemed essential. All but one was considered important, and that remaining one was considered helpful. The highest ranked best practice focuses on teamwork to improve comments. There were two best practices related to case studies. Using a case study during training was considered more important than using a case study for pre-work. The only competency deemed helpful instead of important suggested separating new and returning examiners during training.

Discussion of the Original Best Practices

The focus on teamwork is crucial for the consensus process. Teamwork was the focus of one of the original best practices, and then the panel added another best practice about teamwork. The importance of teamwork in a training session to prepare examiners for the independent review is noteworthy. Some of the comments from the panel members suggested having the actual team work together during the initial training session.

Another best practice worth discussing is the one referring to the use of a case study. Comments from panelists who used a case study for years but have recently stopped using one indicated their delight at the high quality of feedback reports generated without the use of a case study for pre-work thus saving examiners at least forty hours of pre-work before the initial training. One comment from a panelist suggested having the actual team work together on the actual application instead of working on the case study during the initial training. This practice would save examiners hours of work and it would build their confidence in evaluating an application in a sector with which they may be unfamiliar. Confidence building is the topic of one of the core competencies.

Summary of Findings for the Added Best Practices

The most favored of the best practices added by the panel were those pertaining to having an organized approach and the teaching of comment writing and key themes. Coaching is another added best practice that was considered important and was the one panelists associated with the most core competencies. The least favored best practices were those which offered suggestions which might fit some state organizations but not others. For example, having examiners train at various times throughout the year fits with state Baldrige organizations which receive applications throughout the year.

Discussion of the Added Best Practices

Some of the suggested best practices such as having examiners train with their actual teams and work on the actual application during training offer such original ideas that these suggested best practices did not have a very high rank. However, all of the best practices shared by the panel came from the careful thinking and practice of the expert panel members. The low ranks may be due to unfamiliarity with the best practices more than any other cause.

Coaching was one of the favored best practices and received comments from the panelists as to its importance throughout the entire process. However, in some states the examiners do not know who their team leaders are or who the other team members are until after they have completed their independent reviews. As the coach would work with the team as a whole according to the suggestions of the panel, the question becomes where the coach fits into the individual review process.

Summary of Findings from a Synthesis of the Original and Added Best Practices

As the grouping of core competencies into categories shed light on their essentiality and provided a way of looking at original and added items together, this same technique was applied to the best practices. However, the best practices did not fit as readily into categories. Some could easily have fit into two categories, while others seemed to stand alone. This finding may reflect the

uniqueness of each state Baldrige organization, each having its own set of best practices for its particular examiner training program.

While many of the core competencies were considered essential by the Delphi Panel, none of the best practices were considered essential. Again this finding may be due to the diversity in the examiner training programs. All the programs teach Baldrige core competencies, which are based on the Criteria. The best practices, which are the ways the core competencies are taught, vary among the state organizations according to the structure of the state programs and expertise and learning styles of the instructors.

Tables 41 through 51 depict clusters of best practices. Only tables 41 and 42 have as many as four best practices listed. Three of the best practices in Table 9 were considered important. Working in teams is an important best practice.

TABLE 41. Team Best Practices

Team Best Practices	Final Mean	Final Standard Deviation	Original BP	Added BP
Examiners work in teams to review and improve item comments.	3.38	.86	X	
Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a Process and a Results Item.	3.21	.63		X
Examiners participate in an exercise in which each examiner synthesizes the comments of four other examiners and prepares a draft set comments.	2.95	.85		X
Examiners are matched with their team during training.	2.17	.71		X

Ranking: **4: essential, 3: important,** but not essential, **2: helpful,** but not important, **1: unimportant,** should not be included

TABLE 42. Case Study and Pre-work Best Practices

Case Study and Pre-work Best Practices	Final Mean	Final Standard Deviation	Original BP	Added BP
Examiners learn by using a case study in training.	3.00	1.00	X	
Examiners complete a pre-work case study.	2.67	1.11	X	
Pre-workshop individual review of application does not require scoring as scoring is taught in the initial workshop.	2.32	.67		X
Examiners work on their pre-work together with a trainer in Pre-work Labs in computer rooms.	1.95	.78		X

Ranking: **4: essential, 3: important,** but not essential, **2: helpful,** but not important, **1: unimportant,** should not be included

TABLE 43. Real Application Best Practices

Real Application Best Practices	Final Mean	Final Standard Deviation	Original BP	Added BP
Examiners work on real applications, and use the case study only as an example of how everything works together and provides examples of well-written comments and key themes.	2.67	.91		X
Examiners train with their actual team using the real application to learn how to be an examiner instead of a case study document. This means examiner teams assigned to an application learn and work together on the actual application.	2.21	1.03		X

Ranking: **4: essential, 3: important,** but not essential, **2: helpful,** but not important, **1: unimportant,** should not be included

TABLE 44. Criteria Best Practices

Criteria Best Practices	Final Mean	Final Standard Deviation	Original BP	Added BP
Instructors comprehensively present the Criteria Manual.	2.67	.91	X	

Ranking: **4: essential, 3: important,** but not essential, **2: helpful,** but not important, **1: unimportant,** should not be included

TABLE 45. Comments Best Practices

Comments Best Practices	Final Mean	Final Standard Deviation	Original BP	Added BP
Examiners learn good/bad examples of comments and key themes; they must evaluate these against the Criteria for effective comments.	3.16	.69		X
Examiners place their comments on the wall for review by other examiners (Walking the Wall).	2.57	.98	X	
Ranking: **4: essential, 3: important,** but not essential, **2: helpful,** but not important, **1: unimportant,** should not be included				

TABLE 46. Review Process Best Practices

Review Process Best Practices	Final Mean	Final Standard Deviation	Original BP	Added BP
Each step of the examination process is well-defined in sequential order.	3.44	.51		X
Examiners experience the various tasks required in the various phases of the application process.	3.17	.62		X
Examiners participate in an exercise in which they formulate site visit issues and interview questions using the applicant's terms.	2.84	.83		X
Ranking: **4: essential, 3: important,** but not essential, **2: helpful,** but not important, **1: unimportant,** should not be included				

TABLE 47. New Examiners Best Practices

New Examiners Best Practices	Final Mean	Final Standard Deviation	Original BP	Added BP
New examiners receive training with their pre-workshop assignment; they walk through the assignment, practice and complete one process and one results item.	3.11	.58		X
Examiners are put in triads each day where experiences examiners coach new examiners.	2.63	.68		X
New and returning examiners are separated for more specific coaching during the training program.	2.29	.96	X	
Ranking: **4: essential, 3: important,** but not essential, **2: helpful,** but not important, **1: unimportant,** should not be included				

TABLE 48. Coaching and Training Best Practices

Coaching and Training Best Practices	Final Mean	Final Standard Deviation	Original BP	Added BP
Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.	3.00	.75		X
Trainers develop and deliver the entire training program for consistency.	2.84	1.01		X
Ranking: **4: essential, 3: important,** but not essential, **2: helpful,** but not important, **1: unimportant,** should not be included				

TABLE 49. Web Tools Best Practices

Web Tools Best Practices	Final Mean	Final Standard Deviation	Original BP	Added BP
Examiners use a web-based "Examiner Depot" method to share their work during training as well as all assessment stages.	2.63	.83		X
New examiners participate in Virtual Orientations for New Examiners to guide them in the pre-work process.	2.58	.69		X
Examiners participate in Virtual Examiner Trainings.	2.11	.58		X
Ranking: **4: essential, 3: important,** but not essential, **2: helpful,** but not important, **1: unimportant,** should not be included				

TABLE 50. Independent Review Best Practices

Independent Review Best Practices	Final Mean	Final Standard Deviation	Original BP	Added BP
Examiners learn to use an evaluation worksheet as a way to organize and standardize individual review of an application.	2.53	.70		X
Ranking: **4: essential, 3: important,** but not essential, **2: helpful,** but not important, **1: unimportant,** should not be included				

TABLE 51. Scheduling Best Practices

Scheduling Best Practices	Final Mean	Final Standard Deviation	Original BP	Added BP
Examiner training occurs at different times in the year as applicants apply throughout the year.	2.11	.99		X
Ranking: **4: essential, 3: important,** but not essential, **2: helpful,** but not important, **1: unimportant,** should not be included				

Tables 42 and 43 both relate to the use of a case study with contradictory results in the two tables. With respect to Table 42, the first two items in this category were considered important. The important best practice that is suggested here is that a case study be used in pre-work and training. Table 43 suggests that instead of a case study, examiners work on the real application during training, using a case study only as an example. Having examiners work on the actual application during training would save them many hours of independent work. Yet the initial review has been expected to be independent in the past. The first best practice in Table 43 suggesting that examiners work on real applications was considered important. Comments in emails from the panelists support this view that even those who were skeptical at relinquishing the use of a case study have been delightfully impressed with the high quality of feedback reports generated without using a case study as a learning aid. Instead of taking the time to read a case study and evaluate it (thirty-five hours), examiners, in the model being proposed here will be expected to read the actual application before coming to the training workshop.

Table 44 presents the best practice which is related to the teaching of the Criteria, which played an important role in several of the core competencies. The suggestion is that the Criteria Manual be comprehensively presented. This best practice was considered important.

Table 45 presents best practices for teaching comment writing. Learning examples of comments and key themes in relation to the Criteria and posting comments on the wall were both considered important best practices.

Table 46 lists three important best practices for addressing the review process. This process takes into account all phases of the award process rather than limiting the focus to the independent review.

Table 47 suggests two important practices and one helpful practice for new examiners. While this research project intentionally focused on the entire initial examiner training, some practices were suggested to help new examiners with the process.

Table 48 suggests two important practices regarding coaching and training. In the first of these, it is suggested that coaches remain with the team throughout the process. In the second important practice, it is suggested that trainers develop and implement the training program.

Table 49 lists two important and one helpful web tools. The “Examiner Depot” is a tool which allows examiners to upload their evaluations. If these are available to the team members during the independent review, then the independent review becomes more of a team project just as working on a real application with the team would also accomplish.

Table 50 gives the important practice that examiners use a worksheet to organize and standardize their review.

Table 51 gives the helpful practice of offering examiners training sessions at different times during the year. If several of the state Baldrige organizations did this practice, it would surely have been classified as important instead of helpful.

Discussion of the Synthesis of the Original and Added Best Practices

There are some suggested best practices that encourage teamwork from the outset, which changes the nature of the independent review. The value of the independent review must be weighed against the value of teamwork throughout the process. In some states examiners finish their independent reviews before being introduced to their team leaders or team members. The benefits of working with a team from the initial training throughout the process would be greater team synthesis, confidence building of examiners, and a significant reduction in the time required for evaluating applications. With respect to confidence building of examiners, often examiners are asked to evaluate applications outside the sectors of their expertise. However, there are sector experts on each team, who can support the other team members. There are also senior examiners on each team so new examiners have senior members and experts to guide them in the process.

Conclusions for Research Question Two: Best Practices

Even best practices which were classified as helpful might have merit for state Baldrige organizations. The classifications of helpful or important are

based largely on the experiences of panelists. Practices that some experts have not tried might be ranked lower as those are outside the experience of those experts. The conclusion is that the best practices for teaching the core competencies and the value placed on the various strategies depend on the experience of the panelists. Consequently, obtaining high means and low standard deviations did not happen due to this variation.

The case study is controversial. Some panelists wrote comments indicating their delightful surprise at the quality of feedback reports after they had eliminated the case study. Other panelists felt that the case study is useful.

The suggestions by the panel with regard to coaching were for the coach to work with the entire team, not the individual examiners doing independent reviews. The conclusion with regard to coaching is that a coach can make a significant positive contribution to the team. Since a coach is a representative of a senior level examiner position, this conclusion aligns with Lehr and Rice's (2002) finding that examiners learn from team members. In order for a coach to work with a team throughout the whole process as suggested by the panel, the team must work together throughout the entire process.

The conclusion drawn from the results and comments from panelists is that learning to work in teams should be emphasized over individual work as an important method of training. It is noteworthy that teamwork was emphasized in a workshop to prepare examiners for the independent review. Having examiners work in teams might also reduce variation in scoring, which would be consistent

with Plunkett's finding (Plunkett, 2006). The amount of work required for the individual review is generally expected to be approximately fifty hours. If examiners worked in their teams on the actual application during the training session, that fifty hour time frame would be significantly reduced. By reducing the amount of time required by examiners and by building confidence and enjoyment of the process, working in teams might contribute to the retention of examiners, which is a problem in state Baldrige organizations. This conclusion is supported by Clinton (1996) who stressed the essentiality of teamwork in winning when he delivered his speech accompanying the presentation of the award. Furthermore both Blazey (2009) and George (1992) have noted the importance of teamwork in helping an organization reach its goals.

Recommendations for the Field

- State Baldrige organizations should carefully review all of the suggested best practices to see how they might be used in their organizations in the understanding that the contributions are indeed best practices in the organizations which contributed them.
- The case study should be eliminated as pre-work and used only as a source of examples during training.
- The actual team should train together during the initial training session.

- The actual team should work on the actual application during the initial training session. This practice would eliminate the individual review.
- A coach should work with the team throughout the training.

Recommendations for Further Study

- The value of a case study as pre-work should be investigated to determine whether it is effective in helping examiners evaluate and score applications.
- The advantage of eliminating the individual review in favor of teamwork should be investigated to determine how the feedback to the applicant changes without the individual review.
- The use of coaching in the various state Baldrige organizations should be investigated to determine its effectiveness in producing better feedback reports and helping examiners hone their skills.
- Further study should address whether there is a correlation between retention of examiners and working in teams with a coach throughout the entire process.

Research Question Three

What are the best practices for teaching the core competencies?

Summary of Findings of Best Practices for Teaching Core Competencies

The findings from Table 22 of Chapter IV reveal that the associated core competency and best practice with the highest mean deals with the overall structure of the training. (Core competency: “Examiners understand a process for evaluating the application.” Best practice: “Each step of the examination process is well-defined in sequential order.”) The three next highest ranked associations refer to core competencies dealing with comment writing including synthesized comments. The one best practice which was associated with these three core competencies advocates examiners work in teams to write comments and reach consensus on scoring. There were no findings specifically related to helping examiners function effectively during their individual reviews.

Figure 21 of Chapter IV shows the number of best practices associated with each of the core competencies in Table 22 of Chapter IV, and Table 24 of Chapter IV lists the best practices associated with the core competencies of Table 22 of Chapter IV. Core competency 2, "Examiners learn to write opportunities for improvement (OFIs)” and core competency 3, “Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results” were both associated with five best practices, the maximum number of best practices associated with any of the core competencies. Core competency 9, “Examiners learn to write strengths” was associated with four best practices. These three core competencies deal with comment writing, which is the focus of

the initial training and the final product, which is the feedback report to the applicant. Four of the eight best practices in Table 22 of Chapter IV deal specifically with comment writing. There is a natural pairing of core competencies and best practices related to comment writing.

Four of the core competencies had three best practices associated with them: core competency 5, “Examiners understand how to complete each step of the examination process,” core competency 11, “Examiners leave with a sense of confidence in their abilities to perform successfully as examiners,” and core competency 17, “Examiners learn to prepare for site visits.” Two of these core competencies refer to aspects of the process that include aspects after the individual review (item numbers 5 and 17); one of these core competencies (item number 5) refers to the need for examiners to feel confident in their abilities. All other core competencies were associated with only one or two of the best practices.

Figure 22 of Chapter IV shows the number of core competencies associated with the best practices from Table 22, and Tables 25 through 32 of Chapter IV show the pairings of core competencies for each best practice from Table 22 of Chapter IV. Best practice 6, “Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process” was the most favored of the best practices with its association with eleven of the twenty-three core competencies. Comments by panelists further support the importance of coaching as integral to the process. This is a best

practice which applies to all the core competencies. The next most favored best practice was best practice 5, “Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a Process and a Results Item” with ten core competencies associated with it. This best practice deals specifically with using teams to help examiners learn comment writing, scoring, and consensus. Best practice 2, “Examiners work in teams to review and improve item comments” was one of the original best practices while best practice 5 was added by the panel and expounds on the ideas of teamwork and comment writing while adding the competency of scoring. Best practice 2, which was associated with five core competencies, can be subsumed under best practice 5.

Best practice 1, “Each step of the examination is well-defined in sequential order” was associated with seven core competencies. This best practice offers structure to the entire training program. Best practice 3, “Examiners experience the various tasks required in the various phases of the application process,” which was also associated with seven core competencies, refers to the importance of an overview for the entire process. Best practice 4, “Examiners learn good/bad examples of comments and key themes; they must evaluate these against the Criteria for effective comments” was associated with five core competencies. This best practice deals specifically with the writing required of examiners.

The last two best practices were associated with three core competencies. Best practice 7, “Examiners participate in an exercise in which each examiner synthesizes the comments of four other examiners and prepares a draft set of comments” is a specific exercise designed to prepare examiners for the consensus process. Best practice 8, “Examiners learn by using a case study” refers to the use of a case study, which is assigned as pre-work for examiners to complete prior to the initial training. Panelists who have relinquished the use of a case study have been delightfully impressed with the quality of feedback reports without the time-consuming preparatory work from a case study.

Best practices which teach comment writing are vital. The best practice of working in teams and the best practice of coaching are also vital to the evaluation process. In contrast, the case study, which is widely used in state Baldrige organizations, was the least favored in its association with core competencies. There were three core competencies associated with the best practice endorsing the use of a case study. Two of these associations had the lowest means of the fifty-one items.

Interestingly there were twelve of the fifty-one items in Table 52 where two panelists' rankings could be considered as outliers from the rankings by all the other panelists. These twelve items were given a ranking of 1 (ineffective) by the two panelists and only limited comments were provided by one panelist to provide context for understanding these responses. This panelist expressed his thoughts as follows:

> There is one difficulty with the statements about comment and key themes writing. That is a skill that takes time to learn, and as a team lead I did not expect first and second year examiners to be able to write these clearly and tie the criteria into them. More senior examiners served as mentors in the consensus and site process for the newer folks. That meant that someone could be an effective team member and still not have the comment writing skills needed for an acceptable feedback report. To me it is not a binary choice of being competent or incompetent so I had a hard time responding. Personal communication with panelist

With these two panelists rankings removed from the panel averages for these items, the rankings for ten of the items would have shifted from moderately effective to very effective. Table K-1 in Appendix K shows means for these items for the full panel and the recalculated means for these items with the rankings of the two outliers removed.

TABLE 52. Trainer's Template of Best Practices in Teaching the Core Competencies

Core Competencies and Best Practices (with at least 10 panelists associating the best practices below to each core competency below)	
CC1.	**Examiners understand how to complete each step of the examination process.**
BP 1.	Each step of the examination process is well-defined in sequential order.
BP 3.	Examiners experience the various tasks required in the various phases of the application process.
CC2.	**Examiners understand a process for evaluating the application.**
BP 1.	Each step of the examination process is well-defined in sequential order.
BP 3.	Examiners experience the various tasks required in the various phases of the application process.
CC 3.	**Examiners are willing to ask for help and receive it.**
BP 6.	Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.
CC 4.	**Examiners learn to write meaningful key factors.**
BP 8.	Examiners learn by using a case study in training.
CC 5.	**Examiners learn to write strengths.**
BP 2.	Examiners work in teams to review and improve item comments.
BP 4.	Examiners learn good/bad examples of comments and key themes in order to evaluate these against the Criteria for effective comments.
BP 6.	Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.
CC 6.	**Examiners learn to write opportunities for improvement (OFIs).**
BP 2.	Examiners work in teams to review and improve item comments.
BP 4.	Examiners learn good/bad examples of comments and key themes in order to evaluate these against the Criteria for effective comments.
BP 6.	Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.
CC 7.	**Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results.**
BP 4.	Examiners learn good/bad examples of comments and key themes in order to evaluate these against the Criteria for effective comments.
BP 6.	Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.
CC 8.	**Examiners consolidate comments to represent the findings of the team.**
BP 5.	Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.
BP 7.	Examiners participate in an exercise in which each examiner synthesizes the comments of four other examiners and prepares a draft set of comments.
CC 9.	**Examiners know how to give targeted feedback comments that help the applicant move forward on its quality journey but with carefully constructed comments that are not too prescriptive.**
BP 4.	Examiners learn good/bad examples of comments and key themes in order to evaluate these against the Criteria for effective comments.
CC 10.	**Examiners learn to score within a range.**
BP 5.	Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.

TABLE 52. Continued

Core Competencies and Best Practices (with at least 10 panelists associating the best practices below to each core competency below)	
CC 11.	**Examiners learn to verify the score/comment balance.**
BP 5.	Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.
BP 6.	Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.
CC 12.	**Examiners need to understand the consensus process and how it affects the score.**
BP 5.	Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.
CC 13.	**Examiners function effectively as team members.**
BP 5.	Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.
CC 14.	**Examiners listen to and learn from other team members.**
BP 5.	Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.
CC 15.	**Examiners have a full understanding of the Criteria structure with its subsets of Items and Areas to Address.**
BP 8.	Examiners learn by using a case study in training.
CC 16.	**Examiners understand the Criteria are non-prescriptive and adaptable.**
BP 6.	Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.
CC 17.	**Examiners understand the meaning of "how."**
BP 6.	Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.
CC18.	**Examiners learn to evaluate an application in terms of A/D/L/I or Le/T/C/Li/G's.**
BP 8.	Examiners learn by using a case study in training.
CC 19.	**Examiners learn to write key themes.**
BP 4.	Examiners learn good/bad examples of comments and key themes in order to evaluate these against the Criteria for effective comments.
BP 6.	Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.
CC 20.	**Examiners understand the steps in the site visit process including how to identify site visit issues and how to develop site visit worksheets.**
BP 1.	Each step of the examination process is well-defined in sequential order.
BP 3.	Examiners experience the various tasks required in the various phases of the application process.
CC 21.	**Examiners learn to prepare for site visits.**
BP 1.	Each step of the examination process is well-defined in sequential order.
BP 3.	Examiners experience the various tasks required in the various phases of the application process.
BP 6.	Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.

TABLE 52. Continued

Core Competencies and Best Practices (with at least 10 panelists associating the best practices below to each core competency below)	
CC 22.	**Examiners understand the site visit, what it is for, how to ask questions, how to document findings, how those findings clarify/verify site visit issues, and how the findings should be the basis for their conclusions to resolve the site visit issues.**
BP 1.	Each step of the examination process is well-defined in sequential order.
BP 3.	Examiners experience the various tasks required in the various phases of the application process.
CC 23.	**Examiners leave with a sense of confidence in their abilities to perform successfully as examiners.**
BP 3.	Examiners experience the various tasks required in the various phases of the application process.
BP 6.	Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.
BP 1.	Each step of the examination process is well-defined in sequential order.
BP 2.	Examiners work in teams to review and improve item comments.
BP 3.	Examiners experience the various tasks required in the various phases of the application process.
BP 4.	Examiners learn good/bad examples of comments and key themes in order to evaluate these against the Criteria for effective comments.
BP 5.	Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.
BP 6.	Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.
BP 7.	Examiners participate in an exercise in which each examiner synthesizes the comments of four other examiners and prepares a draft set of comments.
BP 8.	Examiners learn by using a case study in training.

Conclusions for Research Question Three: Best Practices for Teaching Core Competencies

In accordance with the highest ranked association as noted above, the overall structure of the training program needs to make each step of the process well-defined and sequential so that examiners will understand how to evaluate the application. Other findings deal with the need for examiners to understand the overall process and, in particular, the site visit process including the writing of site visit issues. The conclusion is for some of the training time to be devoted

to an overview of the evaluation process. This conclusion aligns with managing processes which Blazey (2009) considers vital to successful organizations.

The findings emphasize the importance of comment writing. There are several best practices for teaching comment writing. Comment writing is a skill examiners must learn. The primary best practices for teaching this skill involve teamwork. The conclusion is that examiners work together rather than independently to write pertinent comments to help the applicant progress in its performance improvement.

Clearly teamwork is vital to the process. The question becomes whether the individual review is vital. While it is possible that an individual working alone will generate useful insights, it is also possible that additional insights will arise from teamwork. In reviewing the core competencies in Table 24 of Chapter IV, one does not find any that state that examiners learn to function effectively in their individual reviews; however, there is a core competency stating that examiners learn to function effectively as team members (item number 6). Other core competencies emphasize teamwork in the initial training prior to the individual review. Similarly, none of the best practices in Tables 25 through 32 of Chapter IV specifically target the individual review while four out of the eight best practices refer to teamwork. A best practice which appeared in Round 2 when it was introduced by the panel advocates that the team train together and work on the actual application during the initial training.

Another favored finding is that examiners leave the training with confidence in their abilities. This finding is linked to the findings emphasizing teamwork. The findings suggest that examiners work interdependently rather than independently throughout the process. Confidence will grow as examiners learn from each other (another added best practice) and from their coaches.

Coaching was the most favored of the best practices in its association with the greatest number of core competencies. The suggestion is for a coach to stay with the team throughout the entire process. This is only possible if the team is together throughout the entire process. In some state Baldrige organizations, examiners do not know who their team leader is or the other team members are until shortly before the consensus process, which follows the independent review. Having a coach work with the team from the initial training until the final feedback report would build confidence and help knit the team together with the end result of a stellar feedback report from the team.

Having the team work on the application during the initial training would give examiners the concrete confidence they need and would reduce the number of hours each individual must spend working alone as well as reduce the pressure on the individual examiners. This conclusion is an example of the continuous improvement and anticipation of customer needs as discussed by George (1992). In this case, the examiners as well as the applicant are customers.

Further, a coach would be available to the team. A far reaching benefit might be the retention of examiners who may not have fifty hours to spend on an individual review. This conclusion aligns with Baldrige principles including the principles of valuing workforce members and partners, a focus on the future, and managing for innovation. Furthermore this new structure of having the actual team work on the actual application during training could exemplify the Baldrige principle of visionary leadership.

Another best practice suggested by the panel which initially appeared in Round 2 offers a way for the team to work together after the initial training by putting their work on a web-based program throughout all the assessment stages. Once examiners leave the initial training session, they would work together electronically. This procedure is vastly different from one in which the individual works entirely on one's own without even knowing who the team leader is until the end of the individual review. This conclusion is an example of the innovation that results from agility, a focus on the future, and managing for innovation, which are Baldrige principles.

As best practice 5 of Table 29 in Chapter IV suggests, "Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a Process and a Results Item," the team would also arrive at consensus on scoring. The panel gave numeric scoring a low ranking but gave scoring within a band a high rank. The final award to the applicant demonstrating the highest

level of quality is based on a numeric score. The question arises as to when examiners learn to give a numeric score. This best practice which was favored by the panel for ten core competencies addresses the issue. By working in actual teams during the initial training examiners would go through the consensus process and learn to score numerically with the help of a coach.

Another favored best practice was an exercise specifically addressing the synthesizing of comments (Table 31 of Chapter IV), which is part of the consensus process. If these best practices are applied to the actual team working on the actual application then the individual review would be eliminated.

In this last round of the survey there appear to be two panelists who might be considered outliers in their rankings. These two panelists gave twelve of the fifty-one items in Table 22 a ranking of 1. Given that with the two outliers removed, the means of ten of these items would have shifted upward enough to reclassify them as very effective instead of moderately effective, it may be concluded that these ten items may have an even stronger positive impact in the teaching of core competencies (Appendix K).

Training Template and Scenario

The panel found certain best practices to be effective in teaching core competencies which examiners need to learn to effectively evaluate and score applications and provide meaningful feedback to the applicants (Tables 22, 24, and 25, Chapter IV). The pairings of best practices and core competencies were

originally displayed in order of descending means in Table 22 of Chapter IV. These pairings were presented again in Table 24 of Chapter IV clustered by core competency and again in Table 25 clustered by best practice. Either of the two tables can be used as a template for trainers to use in teaching state Baldrige examiners. Whereas the order in Chapter IV was determined by the means, a more natural order for teaching is presented in the following scenario. The scenario presents one approach for organizing the core competencies and the best ways to deploy them. Hence this scenario may be of primary benefit to trainers in identifying and deploying the best practices in teaching the core competencies in their own programs. The ethics core competency which did not have best practices associated with it is nonetheless important and would be included in any training session.

Prior to the workshop, examiners will receive the actual applications and they will also be in touch with their teams via email where they can introduce themselves in short biographical fashion. By the time of the workshop, examiners will have read the applications which they will not only learn how to evaluate and score, but will actually begin that process with their teams. What will the initial training workshop look like in light of this new model?

Scenario of a Possible Initial Baldrige Workshop for

State Examiners as Suggested by This Study

Agenda – Baldrige Examiner Training Workshop
Pre-work: Examiners read the actual applications.

Day 1 – Morning
- Introductions
- Overview of the workshop
- Overview of the award process
- How to write key factors
- How to write comments

Lunch

Afternoon
- How to score
- Actual teams assemble to assign category champions and begin writing key factors, comments, and begin scoring.

Day 2 – Morning
- Review, questions
- Teamwork
- How to write key themes
- How to use the Criteria

Lunch

Afternoon
- Teams convene to evaluate and score the applications.

Day 3 – Morning
- Review, questions
- Site visit
- Teams convene to evaluate and score the applications.

Lunch

Afternoon
- Teams continue to evaluate and score applications. They plan for any future meetings via teleconferences to conclude their evaluations and scoring of the applications.
- Closing remarks

Day 1

The training begins with hot coffee and warm introductions in which each future examiner tells one interesting aspect of himself or herself in addition to his or her name. The trainers also introduce themselves. The examiners are not sitting with their teams for this initial lecture aspect of training so that they can meet other examiners. In the afternoon, the actual teams will meet together in partitioned spaces so that they can begin writing comments for the actual application.

In the first morning session, after the introductions, the trainers will go over the agenda for the workshop and then give an overview of the award process. Table 52 is a template that details the core competencies and associated best practices for teaching the core competencies as described in the scenario. The trainers will address CC1, “Examiners understand how to complete each step of the examination process.” To address this core competency, trainers will use BP1, “Each step of the examination process is well-defined in sequential order.” As the workshop proceeds, examiners will gain their own understanding of each step in the examination process because the workshop is structured using BP3, “Examiners experience the various tasks required in the various phases of the application process.”

The trainers will then explain the process for evaluating an application to fulfill CC2, “Examiners understand a process for evaluating the application.” Trainers will accomplish this by using BP1, “Each step of the examination

process is well-defined in sequential order." During the workshop examiners will experience the various tasks as described in BP3.Trainers will then emphasize CC3, "Examiners are willing to ask for help and receive it." While examiners are encouraged to ask questions in the larger group session with the trainers, it is especially important for examiners to seek help from the team coaches in accordance with BP6, "Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process."

The trainers will now begin teaching examiners how to determine key factors and write comments. Trainers can use examples from a case study (BP8) to teach CC4, "Examiners learn to write meaningful key factors." Trainers can use examples of comments to teach examiners how to write strengths and opportunities for improvement. These two core competencies, CC5 and CC6, "Examiners learn to write strengths," and "Examiners learn to write opportunities for improvement (OFIs)," can be taught by using BP2, "Examiners work in teams to review and improve comments," BP4, "Examiners learn good/bad examples of comments and key themes in order to evaluate these against the Criteria for effective comments," and BP6, "Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process."Examiners will stress CC7, "Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results," by using examples of comments as they relate to the Criteria according to BP4. Again,

once examiners are working in their teams, coaches will help examiners hone this competency.

Now that there is no longer an independent review with each examiner writing six to eight comments for each item, it will be easier to accomplish CC8, “Examiners consolidate comments to represent the findings of the team.” In this new model where examiners work in teams throughout the entire evaluation and scoring process, the category champions will write six to eight comments for their items, while the other team members will contribute two comments for each item to insure that the most salient points are included in the final comments. To prepare examiners for this work, the trainers will use BP5, “Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and results item,” and BP7, “Examiners participate in an exercise in which each examiner synthesizes the comments of four other examiners and prepares a draft set of comments.”

With the applicant in mind as the primary customer, trainers will address CC9, “Examiners know how to give targeted feedback comments that help the applicant move forward on its quality journey but with carefully constructed comments that are not too prescriptive.” Trainers will use examples as suggested in BP4 and have mock teams work together to agree on comments and scoring as suggested in BP5.

The session will break for lunch after a full first morning of instruction. After lunch the trainers will address scoring before having the actual teams gather to begin evaluating and scoring applications. BP5, “Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and results item” can be used to teach the three core competencies dealing with scoring, CC10, “Examiners learn to score within a range,” CC11,”Examiners learn to verify the score/comment balance,” and CC12, “Examiners need to understand the consensus process and how it affects the score.” When examiners agree on the important strengths and OFIs the consensus score should follow naturally with a proper balance of strengths and OFIs to reflect the score. A high score will naturally have an abundance of strengths, while a low score will have a greater number of OFIs. Working within the teams, coaches will help examiners understand the relationship of strengths and OFIs to scoring. Day 1 will conclude with teams convening to assign category champions and begin writing key factors, writing comments, and scoring.

Day 2

The second day will begin with a review and a question period. Trainers will then address the core competencies of teamwork, key themes, and the Criteria. As examiners will have already had some experience in working with

their teams, the two core competencies pertaining to teamwork will serve as reminders of the positive attitude needed from each examiner. Both teamwork competencies, CC13, “Examiners function effectively as team members,” and CC14, “Examiners listen to and learn from other team members,” can be taught most effectively by having examiners work in teams to review individual comments and scoring, and agree on the important comments and scoring as described in BP5.

The Criteria provide the backbone of the application. As such, examiners must understand the Criteria and apply it in evaluating and scoring applications. To effectively teach CC15, “Examiners have a full understanding of the Criteria structure with its subsets of Items and Areas to Address,” trainers will use examples from a case study (BP8). Coaches (BP6) will effectively help examiners apply CC16, “Examiners understand the Criteria are non-prescriptive and adaptable” as examiners tackle comment writing.

The next two core competencies, CC17, “Examiners understand the meaning of ‘how,’ and CC18, “Examiners learn to evaluate an application in terms of A/D/L/I or Le/T/C/Li/G’s” are similar. *How* refers to process that an applicant has in place. In explaining those processes, the applicant describes the approach, deployment, learning, and integration (Blazey, 2009). Coaches (BP8) can help examiners learn *how.* Trainers can use examples from a case study (BP8) to effectively teach examiners to evaluate applications according to A/D/L/I or Le/T/C/Li/G’s.

Trainers will then discuss the significance of key themes, which may be read as an executive summary. The pertinent core competency is CC19, “Examiners learn to write key themes.” Trainers can use good/bad examples in conjunction with the Criteria (BP4) to effectively teach this core competency. When examiners are working on their actual applications, coaches (BP6) will be valuable in helping examiners mine the key themes. The remainder of this second day of the workshop will be spent with the teams continuing to evaluate and score the actual applications.

Day 3

Because it is important for examiners to understand the entire award process, trainers will devote some time to core competencies regarding site visits: CC 20, “Examiners understand the steps in the site visit process including how to identify site visit issues and how to develop site visit worksheets,” CC21, “Examiners learn to prepare for site visits,” and CC22, “Examiners understand the site visit, what it is for, how to ask questions, how to document findings, how those findings clarify/verify site visit issues, and how the findings should be the basis for their conclusions to resolve the site visit issues.” In their presentations, the trainers are making sure that each step of the examination process is well-defined and proceeds in sequential order (BP1), and they are giving examiners a taste of the various tasks required in the various phases of the examination

process (BP3). During the actual teamwork sessions, examiners will benefit from the experiences of their coaches (BP6), all of whom have been on site visits.

In the past, examiners left the workshop having completed the case study to return home and receive applications a few weeks later that read very differently from the case study. Yet examiners did not even know who their team leaders were. Fifty hours of sequestered work over the holidays ensued. In the new model proposed by this study, CC23, “Examiners leave with a sense of confidence in their abilities to perform successfully as examiners,” will be true for they will already be evaluating and scoring applications under the guidance of experienced coaches (BP6) and team leaders. Examiners will have experienced the various tasks in the various phases (BP3). When they go home they will know exactly what they need to do to complete the evaluation and scoring. Furthermore, because of the way scoring is taught and implemented wholly through teamwork, there will be less non-value added variation in scoring.

Benefits of the Proposed Training Structure

To be worth the great expenditure of time examiners spend evaluating applications, examiners must feel the benefits are worthwhile either in terms of what they are contributing or receiving. With the new structure this study is proposing, examiners will accomplish so much and gain so much confidence during the initial workshop that the number of weekends required to complete the evaluation will be greatly reduced. The time frame for the initial workshop

may also be reduced while the amount of work accomplished will increase as a coach and team leader guide the team members in the process.

After the initial workshop the team will continue its work through email and a web-based program for inputting the evaluations. This new structure will eliminate the need for the eight hour consensus phone call because the team will be establishing consensus throughout the process.

Recommendations for the Field

- Lecture during the workshop should be minimized to provide maximum time for the teams to work on evaluating and scoring the real applications.
- A coach should work with the team throughout the entire process, beginning during the initial workshop.
- The team should continually arrive at consensus as they work together on comments and numeric scoring.
- Evaluations of applications made by team members after the workshop should be entered into a database which the team members can access.
- The scenario for the examiner training workshop should be implemented on a pilot basis and evaluated for intended outcomes. The pilot will determine

- How to deal with confidentiality consistent with Baldrige expectations
- The extent to which the applications can be realistically reviewed in a three day training session and which portion remains for review
- The process by which consensus will be determined on that portion after the training
- How to restructure the consensus phone call in light of the new structure based on teams working together throughout the process

While these changes are potentially significant for the training methodology, the award scheduling process, and the schedule leading up to the award, the suggested changes may consequently incur some resistance; however, given Baldrige's core values of agility, focus on the future, and emphasis on continuous improvement, these recommended changes should be viewed with these tenets in mind as well as the opportunity to reduce non value added variation in the examiner process resulting in an improved feedback report to the applicant.

Recommendations for Further Study

- The time frame needed for the initial workshop should be investigated to determine how the new structure for the workshop affects the time allocation.
- The use of a database for examiners to input comments and scores should be investigated to determine the efficiency and value to examiners and to the process.
- Further study should compare the feedback reports and examiner retention between organizations which adopt this new teamwork framework and those which maintain the independent review structure.
- Additional research needs to be conducted utilizing a broader group of quality experts to determine the legitimacy of the perceived effectiveness of the ten items, which with the outliers removed would have been considered very effective (Appendix K, Table K-1).

Conclusions Across Research Questions

The difference in means between core competencies and best practices indicates the need for a set of best practices to accompany the core competencies. Whereas there were many core competencies with ranks greater than 3.5 and relatively low standard deviations, the best practices had none with ranks greater than 3.5 and the standard deviations were much higher. The core

competencies came from the literature whereas the best practices came from the expertise of the panelists. One contribution of the present study is to provide a set of best practices for teaching the core competencies. This sharing of best practices aligns with the basic Baldrige tenet of the sharing of best practices. Several of the best practices align with the core competencies in referring to either comment writing or the Criteria. The conclusion is that the suggested best practices for teaching the core competencies will be effective because of the close alignment.

Recommendations for the Field

The suggested best practices for teaching the core competencies should be applied as presented in the scenario and Table 52.

Recommendations for Further Study

Further study should be conducted to determine the effectiveness of these best practices for teaching core competencies after they have been used in the initial pilot workshops.

Additional Conclusions

There is a gap in the literature with respect to best practices for teaching core competencies. The present study offers an initial set of such best practices. As part of the continuing improvement that is integral to Baldrige programs,

continued monitoring of the best practices may yield additional best practices and refine those suggested in this study. At the national level, a similar study could provide a useful set of best practices which would continue to evolve through monitoring and feedback. Such a set of best practices is appropriate for an organization rooted in continuous improvement.

In terms of how the present study might have been done differently, there are two changes. The first involves consolidating the core competencies added by the panelists to a greater degree than was done in the present study, which aimed to preserve most of the language of the contributing panelists.

Secondly, the panelists found the Excel matrix in Round 3 to be cumbersome. In this matrix they were asked whether a given best practice was associated with a given core competency. The panelists did not rank the pairings in the matrix. By consolidating the core competencies, there would be fewer core competencies, and by having them displayed in a Word Table, the panelists might find the pairings easier to associate.

In keeping with Plunkett's (2006) conclusions in which she found greater scoring variation in new teams and more consistency in senior teams, the proposed format of this study would help reduce variation in scoring because senior members – a coach and team leader – would be available to guide and teach new examiners as the team arrives at consensus throughout the process, category by category, instead of waiting until each examiner has scored an entire application independently.

What was especially beneficial in the present study was inviting panelists to contribute comments in addition to ranking the items. The panelists took the time to contribute many helpful comments which made the study richer than it would have been with only numeric rankings.

Recommendations for the Field

Adopt a monitoring and feedback system throughout the evaluation process such as a Plan Do Study Act (PDSA) approach.

Recommendations for Further Study

Collect data from the PDSA notes from all the teams to further refine best practices for teaching and implementing core competencies. Analysis of the data collected could improve and quantify consistency among teams.

Closing Comments

As stated in the research proposal, the purpose of this research was threefold: (1) to determine the core competencies needed by state Baldrige examiners, (2) to identify best practices in examiner training programs provided by state Baldrige organizations, and (3) to identify the best practices for teaching the core competencies. The outcome of this research will be to develop an Examiner Training Template for teaching identified core competencies using best practices.

This study has accomplished all three research purposes with the resultant outcome of an Examiner Training Template. The significance of the study is in contributing a template to the literature where none existed. This training template serves as a unifying model which may strengthen any Baldrige program—state or national—which chooses to use it.

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APPENDIX A

LETTER TO BALDRIGE DIRECTORS

Sandra E. Brooks Bryant

March 18, 2008

Dear

I am a doctoral student in Educational Administration at Texas A&M University. Additionally, I serve as an Examiner for Quality Texas in the Texas Award for Performance Excellence (TAPE) program. As part of this experience, I have noted some variation in the training provided to Examiners.

Consequently, for my dissertation project, I intend to compile the best practices for Stage I Examiner Training as well as the core competencies needed by Examiners to evaluate and score applications as identified by leading state Baldrige highly qualified Examiner trainers. From the results based on the perspective of the expert panel, I will produce a template for you to use in your own examiner training if you so wish.

I have reviewed your website and attempted to extract information relevant to my study from it. However, many of the specifics did not appear on the website. Consequently I would very much appreciate your assistance in supplementing what is not available on your website. To this end I would appreciate your providing me information regarding your Stage I Examiner Training process:

- The process for identifying and selecting examiners.
- Length and organization of Stage I Examiner Training.
- Stage I Training Program curriculum.
- Delivery modalities of Stage I Examiner Training.
- Any results from recent assessments that you have conducted for Stage I Examiner Training.
- Additionally, any information that may not be covered in the above points for Stage I that you deem useful.
- If there is information on your website which I was not able to extract, please indicate where I might locate it.

From the information provided, I will develop a questionnaire for the instructors who serve in Stage I Examiner Training programs. These instructors will comprise an expert panel who will be asked to assist in the research in identification of best practices and core competencies.

Accordingly, could you also please provide me with contact information for two instructors whom you believe to be experts in Stage I Examiner training and who meet the following requirements:

- They have served as instructors for at least three years,
- served as either a feedback writer or team leader for at least one year,

- served as either a state or national level Baldrige Examiner for at least two years,
- and have been on at least one site visit?

Through a series of feedbacks from the expert panel, I will develop a template of best practices for training Examiners in core competencies. I will share this template with state programs in the hope that it will provide you with opportunities for improvement of your Examiner Training Program.

I understand the demands on your time and greatly appreciate your assistance in sending me information regarding your Examiner training process and materials as well as contact information for two of your instructors. It would be helpful if you could provide the requested information by April 4. If you have any questions, please feel free to contact me.

Sincerely,

Sandra E. Brooks Bryant
College Station, TX 77845
sandrabryant8@msn.com

APPENDIX B

SURVEY INSTRUCTIONS

Instructions
Survey of Core Competencies and Best Practices in State Baldrige Examiner Training Programs

Dear Expert Panel Member:

The following survey seeks to determine your perspective of the essentiality of the core competencies and best practices in state Baldrige examiner training programs. This initial list of core competencies and best practices was derived by the researcher from the Quality Texas Examiner Reference Manual and the Quality Texas Criteria for Performance Excellence. Consequently, it is recognized that this most likely will reflect an incomplete list and may also reflect core competencies and best practices that you do not deem essential.

Please rank the level of essentiality for each core competency and best practice statement based on your belief of its importance in state Baldrige examiner training programs. Please place the number corresponding to your ranking in the "Ranking" column in accordance with the following criteria:

4 represents a core competency or best practice which is **essential** in the training of examiners;
3 represents a core competency or best practice which is **important but not essential** in the training of examiners;
2 represents a core competency or best practice which is **helpful but not very important** in the training of examiners;
1 represents a core competency or best practice which is **unimportant and should not be included** in the training of examiners.

Upon completion of your ranking of these items, please add any additional core competencies that you believe should be included in state Baldrige examiner training programs. Similarly, please add any additional best practices that you believe should be included in state Baldrige examiner training programs. All additional core competencies and best practices will be included in round 2 of the Delphi Panel survey for review and ranking by the entire panel.

In order to complete the survey if you are using email, please save the attachment after ranking the items and adding new ones. Then return the completed, saved survey via email. If you are using US Mail, I have provided a stamped return envelope for your convenience. Should you have any questions or need to contact me, my email is sandrabryant8@msn.com.

Thank you for your participation in this important project.

Core Competencies	Ranking
1. Examiners must learn to write meaningful key factors.	
2. Examiners must learn to relate specific key factors to criteria items.	
3. Examiners must learn to evaluate an application in terms of A/D/L/I or Le/T/C/Li/G's.	
4. Examiners must learn to write strengths.	
5. Examiners must learn to write opportunities for improvement (OFIs).	
6. Examiners must learn how to score within a range.	
7. Examiners must learn how to assign an exact numeric score.	
8. Examiners must learn to verify the score/comment balance.	
9. Examiners must learn to write key themes.	
10. Examiners must have a full understanding of the role that the Criteria play in contributing value to customers and stakeholders and organizational sustainability.	
11. Examiners must have a full understanding of the role the Criteria play in the improvement of overall organizational effectiveness and capabilities.	
12. Examiners must have a full understanding of the role the Criteria play in organizational and personal learning.	
13. Examiners must have a full understanding of the role the core values and concepts play in the Criteria.	
14. Examiners must have a full understanding of the importance of the organizational profile in setting the context for the way the organization operates.	
15. Examiners must have a full understanding of the system operations (categories 1, 2, 3, 5, 6, and 7) and the system foundation (category 4).	
16. Examiners must have a full understanding of the criteria structure with its subsets of Items and Areas to Address.	
17. Examiners understand that the Criteria focus on results.	
18. Examiners understand that the Criteria are non-prescriptive and adaptable.	
19. Examiners understand that the Criteria support a systems perspective to maintaining organization-wide goal alignment.	
20. Examiners understand that the Criteria support goal-based diagnosis.	
21. Examiners understand the meaning of "how."	
22. Examiners understand the meaning of "what."	
23. Examiners understand the importance of cross-references across categories.	
24. Examiners understand that the focus in the results items is on the most critical organizational performance results.	
25. Examiners understand how to apply the terms in the Glossary of Key Terms.	
Please add any additional core competencies that you feel are essential or important for state Baldrige examiner training that are not included above:	
1) Examiners must have collaboration skills to effectively and efficiently complete the assessment process.	
Best Practices	
26. Examiners complete a pre-work case study.	
27. Examiners learn by using a case study in training.	
28. Instructors comprehensively present the Criteria Manual.	
29. Examiners place their comments on the wall for review by other examiners.	
30. New and returning examiners are separated for more specific coaching during the training program.	
31. Examiners work in teams to review and improve item comments.	
Please add any additional best practices that you feel are essential or important for state Baldrige examiner training that are not included above:	
1) . . . n)	

Ranking: **4: essential, 3: important,** but not essential, **2: helpful,** but not important, **1: unimportant,** should not be included

APPENDIX C

ROUND 2 INSTRUCTIONS AND SURVEY TEMPLATE

Instructions for Round 2
Survey of Core Competencies and Best Practices in State Baldrige Examiner Training Programs

Dear:

First, let me thank you again for your participation in the study and for your important input. I appreciate the time and effort that you are providing, and I am confident that our combined work will provide valuable insight to the training of state Baldrige examiners.

This second round of the survey seeks to refine the expert panel's perspective of the essentiality of the core competencies and best practices in the **initial** state Baldrige **examiner training programs prior to consensus**. I have synthesized and included all the contributions that the panel has made that pertain to the **initial examiner training prior to consensus**. Again, thank you for your thoughtful contributions.

The first two rounds of the survey (the one you have already completed and this one) identify both the core competencies needed by state Baldrige examiners and the best practices in examiner training programs provided by state Baldrige organizations. These are necessary preludes to the ultimate purpose of the research, which we will address in Round 3, namely to determine the best practices for teaching core competencies. This determination will lead to the development of a template based on best practices for teaching core competencies which will be available for your use.

For your ease in filling out Round 2 of the survey, I have created four tables with instructions for each one just above its respective table: the first table contains the results of the panel's responses to the initial list of core competencies. The second table contains the new core competencies suggested by the panel of experts of which you are a member. The third table contains the results from your responses to the initial items for best practices. The fourth table contains the new best practices suggested by the panel of experts of which you are a member. **Note that each table with its instructions begins on a separate page, so please scroll down for each of the four tables.**

You will be using the same ranking system of numbers 1 – 4 as you used in Round 1 of the survey. These numbers have the following working definitions:

- **4** represents a core competency or best practice which is **essential** in the training of examiners;
- **3** represents a core competency or best practice which is **important but not essential** in the training of examiners;
- **2** represents a core competency or best practice which is **helpful but not very important** in the training of examiners;
- **1** represents a core competency or best practice which is **unimportant and should not be included** in the training of examiners.

You are welcome to write comments in an email or at the beginning or end of the survey. In order to complete the survey if you are using email, please save the attachment after ranking the items and adding new ones. Then return the completed, saved survey via email. Should you have any questions or need to contact me, my email is sandrabryant8@msn.com.

Thank you for your continued participation in this important project.

Instructions for Table C-1

I have provided the mean and standard deviation for each initial core competency item based on the expert panel's Round 1 responses along with your own ranking of each item. If, after reviewing your ranking in light of the panel consensus, you want to change how you ranked an item, please put your new rank in the 'new rank' column.

TABLE C-1. Core Competencies Ranked in the First Round

Core Competencies	Mean From Round 1 Responses	Standard Deviation	Your Rank Round 1	New Rank
1. Examiners must learn to write meaningful key factors.	3.32	.72		
2. Examiners must learn to relate specific key factors to criteria items.	3.82	.50		
3. Examiners must learn to evaluate an application in terms of A/D/L/I or Le/T/C/Li/G's.	3.64	.66		
4. Examiners must learn to write strengths.	3.73	.46		
5. Examiners must learn to write opportunities for improvement (OFIs).	3.77	.43		
6. Examiners must learn how to score within a range.	3.64	.49		
7. Examiners must learn how to assign an exact numeric score.	2.41	1.01		
8. Examiners must learn to verify the score/comment balance.	3.41	.67		
9. Examiners must learn to write key themes.	3.24	.77		
10. Examiners must have a full understanding of the role that the Criteria play in contributing value to customers and stakeholders and organizational sustainability.	3.27	.88		
11. Examiners must have a full understanding of the role the Criteria play in the improvement of overall organizational effectiveness and capabilities.	3.18	.85		
12. Examiners must have a full understanding of the role the Criteria play in organizational and personal learning.	3.14	.83		
13. Examiners must have a full understanding of the role the core values and concepts play in the Criteria.	3.09	.61		
14. Examiners must have a full understanding of the importance of the organizational profile in setting the context for the way the organization operates.	3.77	.43		
15. Examiners must have a full understanding of the system operations (categories 1, 2, 3, 5, 6, and 7) and the system foundation (category 4).	3.41	.59		
16. Examiners must have a full understanding of the criteria structure with its subsets of Items and Areas to Address.	3.32	.57		
17. Examiners understand that the Criteria focus on results.	3.45	.74		
18. Examiners understand that the Criteria are non-prescriptive and adaptable.	3.64	.58		
19. Examiners understand that the Criteria support a systems perspective to maintaining organization-wide goal alignment.	3.55	.60		
20. Examiners understand that the Criteria support goal-based diagnosis.	2.91	.87		
21. Examiners understand the meaning of "how."	3.68	.48		
22. Examiners understand the meaning of "what."	3.45	.60		
23. Examiners understand the importance of cross-references across categories.	3.50	.60		
24. Examiners understand that the focus in the results items is on the most critical organizational performance results.	3.59	.50		
25. Examiners understand how to apply the terms in the Glossary of Key Terms.	2.86	.77		

Ranking: **4: essential, 3: important,** but not essential, **2: helpful,** but not important, **1: unimportant,** should not be included

Instructions for Table C-2

The core competencies in this table include those that the expert panel identified in Round 1 and were not included as a part of the original list. Please rank the level of essentiality for each core competency statement based on your belief of its importance in state Baldrige **examiner training programs prior to consensus**. The training programs may include both new and returning examiners. **Please place the number (1, 2, 3, or 4) corresponding to your ranking in the "Ranking" column. Only numbers go in this column.**

If you are unfamiliar with an item, or if an item does not seem to apply to your own particular program, please rank it based on the value you think it might contribute to a state Baldrige examiner training program rather than leaving the rank blank. If you do not understand the item, please call or email me. Note that item 8 refers to a NIST document, which I have attached to this email.

TABLE C-2. New Core Competencies Suggested by the Delphi Panel

	New Core Competencies	Rank (1,2,3, or 4)
1	Examiners can function effectively as team members.	
2	Examiners know how to redefine their assessment approach and feedback comments (the learning from training focuses on Award level assessment) to writing comments at other levels of applications (i.e., Level 1 or Level 2 application criteria).	
	New Core Competencies	**Rank (1,2,3,or 4)**
3	Examiners know how to adapt their experience and sector knowledge to the applicant's sector as they give feedback comments.	
4	Examiners know how to give targeted feedback comments that help the applicant move forward on its quality journey but with carefully constructed comments that are not too prescriptive.	
5	Examiners know how to write comments that tie the feedback messages from the examiner back to the criteria, organizational profile, key factors, and key processes and results.	
6	Examiners meet deadlines.	
7	Examiners consolidate comments to represent the findings and score of the team.	
8	Examiners accurately apply "considerations for a small organization" as developed by NIST (See attached.)	
9	Examiners abide by Conflict of Interest and Code of Conduct rules.	
10	Examiners learn to include "so whats" for both strengths and OFI's	
11	Examiners understand a process for evaluating the application.	
12	Examiners understand the steps in the site visit process including how to identify site visit issues and how to develop site visit worksheets.	
13	Examiners leave the training with a sense of confidence in their ability to perform successfully as examiners.	
	New Core Competencies	**Rank (1,2,3, or 4)**
14	Examiners exhibit a sense of commitment to the process.	
15	Examiners listen to and learn from other team members.	
16	Examiners are willing to ask for help and receive it.	
17	Examiners fully understand the entire award process.	
18	Examiners understand common terminology used during training and the examination process that may not appear in the Criteria glossary.	
19	Examiners understand how to complete each step of the examination process.	
20	Examiners understand that the Criteria are complex but not complicated. That is, the Criteria are complex because they consist of several parts, which are linked holistically, but they are not complicated because they can be understood and explained.	

Ranking: **4: essential, 3: important,** but not essential, **2: helpful,** but not important, **1: unimportant,** should not be included

Instructions for Table C-3

I have provided the mean and standard deviation for each initial best practice item based on the expert panel's Round 1 responses along with your own ranking of each item. If, after reviewing your ranking in light of the panel consensus, you want to change how you ranked an item, please put your new rank in the 'new rank' column.

TABLE C-3. Best Practices Ranked in the First Round

Best Practices	Mean From Round 1 Responses	Standard Deviation	Your Rank Round 1	New Rank
1. Examiners complete a pre-work case study.	2.64	1.14		
2. Examiners learn by using a case study in training.	3.00	1.07		
3. Instructors comprehensively present the Criteria Manual.	2.68	.95		
4. Examiners place their comments on the wall for review by other examiners (Walking the Wall).	2.50	1.01		
5. New and returning examiners are separated for more specific coaching during the training program.	2.36	1.09		
6. Examiners work in teams to review and improve item comments.	3.50	.80		

Ranking: **4: essential, 3: important,** but not essential, **2: helpful,** but not important, **1: unimportant,** should not be included

Instructions for Table C-4

The best practices in this table include those that the expert panel identified in Round 1 and were not included as a part of the original list. Please rank the level of essentiality for each core best practice statement based on your belief of its importance in state Baldrige **examiner training programs prior to consensus**. The training programs may include both new and returning examiners. **Please place the number (1, 2, 3, or 4) corresponding to your ranking in the "Ranking" column. Only numbers go in this column.**

If you are unfamiliar with an item, or if an item does not seem to apply to your own particular program, especially a best practice, please rank it based on the value you think it might contribute to a state Baldrige examiner training program rather than leaving the rank blank. If you do not understand the item, please call or email me.

TABLE C-4. New Best Practices Suggested by the Delphi Panel

New Best Practices	Rank (1,2,3, or 4)
1. Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.	
2. Examiners train with their actual team using the real application to learn how to be an examiner instead of a case study document. This means examiner teams assigned to an application learn and work together on the actual application.	
3. Examiners use a web-based "Examiner Depot" method to share their work during training as well as all assessment stages.	
4. Examiners participate in Virtual Examiner Trainings.	
5. New examiners participate in Virtual Orientations for New Examiners to guide them in the pre-work process.	
6. Examiners work on their pre-work together with a trainer in Pre-work Labs in computer rooms.	
7. Examiners get a glimpse of the judging process so that they understand the effect of their work.	
8. Examiners are matched with their team during training.	
9. Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a Process and a Results Item.	
10. New examiners receive training with their pre-workshop assignment; they walk through the assignment, practice and complete one Process and Results Item.	
11. Pre-workshop individual review of application does not require scoring as scoring is taught in the initial training workshop.	
12. Examiners learn good/bad examples of comments and key themes; they must evaluate these against the Criteria for effective comments.	
13. Examiners learn to use an evaluation worksheet as a way to organize and standardize individual review of an application.	
14. Examiners experience the various tasks required in the various phases of the application process.	
15. Examiners learn to identify best practices.	
16. Examiners learn to prepare for site visits.	
17. Examiners need to identify only the scoring band for consensus.	
18. Examiner training occurs at different times in the year as applicants apply throughout the year.	
19. Examiners participate in an exercise in which each examiner synthesizes the comments of four other examiners and prepares a draft set comments.	
20. Examiners participate in an exercise in which they formulate site visit issues and interview questions using the applicant's terms.	
21. Examiners are put in triads each day where experienced examiners coach new examiners.	
22. Examiners need to understand the consensus process and how it affects the score.	
23. Examiners must understand the site visit, what it is for, how to ask questions, how to **document** findings, how those findings clarify/verify site visit issues, and how the findings should be the basis for their conclusions to resolve the site visit issues.	
24. Examiners work on real applications, and use the case study only as an example of how everything works together and provides examples of well written comments and key themes.	
25. Each step of the examination process is well defined in sequential order.	
26. Trainers develop and deliver the entire training program for consistency.	
27. The case study is not the best means for examiners to learn how to evaluate an application and write comments.	

Ranking: **4: essential, 3: important,** but not essential, **2: helpful,** but not important, **1: unimportant,** should not be included

APPENDIX D

ROUND 3 SURVEY

Instructions for Round 3
Survey of Core Competencies and Best Practices in
State Baldrige Examiner Training Programs

Dear:

First, let me thank you again for your participation in the study and for your important input. I appreciate the time and effort that you are providing, and I am confident that our combined work will provide valuable insight to the training of state Baldrige examiners.

This third round of the survey seeks to further refine the expert panel's perspective of the essentiality of the core competencies and best practices in the **initial** state Baldrige **examiner training programs prior to consensus**. The first two rounds of the survey identified both the core competencies needed by state Baldrige examiners and the best practices in examiner training programs provided by state Baldrige organizations. These are necessary preludes to the ultimate purpose of the research, which we will address in this round, namely to determine the **best practices for teaching core competencies**. This determination will lead to the development of a template based on best practices for teaching core competencies which will be available for your use.

All of the initial core competencies and best practices, which you had a chance to re-rank in round 2, are stable meaning that there was less than a 15% change in the responses. Since these items all demonstrate consensus, they do not appear in this round.

Tables D-1 and D-2 of this round contain the core competencies (Table D-1) and best practices (Table D-2) that the panel of experts added in Round 1 and which appeared for initial ranking in round 2. In this third round, the panel will be given the opportunity to review your individual ranking in light of the panel's overall ranking to determine whether you wish to keep your original ranking or change it. Additionally, the panel will begin to determine the essential best practices for teaching the essential core competencies. For the purposes of this round (pending consensus on the Delphi panel suggested core competencies and best practices which appear for re-ranking in Tables D-1 and D-2 of this round), core competencies and best practices with a Delphi panel item mean of at least 3.0 are considered essential/important for consideration for inclusion in examiner training programs. Table D-3 addresses the relationship of essential best practices to essential core competencies. It is necessary that all items initially ranked at 3.0 or higher be included in Table D-3 for relating best practices to core competencies.

Instructions for each of the tables precede the respective table. For Tables D-1 and D-2, you will be using the same ranking system of numbers 1 – 4 as you used in Rounds 1 and 2 of the survey. These numbers have the following working definitions:

4 represents a core competency or best practice which is **essential** in the training of examiners;
3 represents a core competency or best practice which is **important but not essential** in the training of examiners;
2 represents a core competency or best practice which is **helpful but not very important** in the training of examiners;
1 represents a core competency or best practice which is **unimportant and should not be included** in the training of examiners.

You are welcome to write comments in an email or at the beginning or end of the survey. In order to complete the survey if you are using email, please save the attachments and return the completed, saved survey via email. Should you have any questions or need to contact me, my email is sandrabryant8@msn.com.

Thank you for your continued participation in this important project.

Instructions for Table D-1

Core Competencies Suggested by the Delphi Panel

I have provided the Delphi panel mean and standard deviation for the core competencies that were new in round 2. I have also added your individual ranking. If, after reviewing your ranking in light of the Delphi panel item means, you want to change how you ranked an item, please put your new rank in the 'New Rank' column. If you do not want to change your response, you can leave the 'New Rank' column blank. I think I have adjusted the formatting of the 'New Rank' column so that you can easily input any changes. If, however, you have trouble inputting your new rank, please feel free to expand the column width, or play with the ruler, or do anything else that will allow you to input the number.

The operational definition of core competency is "a skill needed by examiners to effectively evaluate and score an application. It answers the question 'what' and describes an outcome." While I know all of you are experts and understand the meaning of core competency, please use this definition if it helps you in deciding on a rank.

TABLE D-1. Core Competencies Suggested by the Delphi Panel

	Core Competencies	Mean	Standard Deviation	Your Rank Round 2	New Rank
1.	Examiners can function effectively as team members.	3.29	.85		
2.	Examiners know how to redefine their assessment approach and feedback comments (the learning from training focuses on Award level assessment) to writing comments at other levels of applications (i.e., Level 1 or Level 2 application criteria).	2.57	.98		
3.	Examiners know how to adapt their experience and sector knowledge to the applicant's sector as they give feedback comments.	2.95	.67		
4.	Examiners know how to give targeted feedback comments that help the applicant move forward on its quality journey but with carefully constructed comments that are not too prescriptive.	3.38	.92		
5.	Examiners know how to write comments that tie the feedback messages from the examiner back to the criteria, organizational profile, key factors, and key processes and results.	3.81	.40		
6.	Examiners meet deadlines.	3.90	.30		
7.	Examiners consolidate comments to represent the findings and score of the team.	3.33	.73		
8.	Examiners accurately apply "considerations for a small organization" as developed by NIST. (See attached.)	3.10	.63		
9.	Examiners abide by Conflict of Interest and Code of Conduct rules.	3.86	.48		
10.	Examiners learn to include "so whats" for both strengths and OFI's.	2.95	.87		
11.	Examiners understand a process for evaluating the application.	3.52	.51		
12.	Examiners understand the steps in the site visit process including how to identify site visit issues and how to develop site visit worksheets.	3.19	.93		
13.	Examiners leave the training with a sense of confidence in their ability to perform successfully as examiners.	3.14	.73		
14.	Examiners exhibit a sense of commitment to the process.	3.33	.80		
15.	Examiners listen to and learn from other team members.	3.24	.54		
16.	Examiners are willing to ask for help and receive it.	3.52	.51		
17.	Examiners fully understand the entire award process.	2.71	.64		
18.	Examiners understand common terminology used during training and the examination process that may not appear in the Criteria glossary.	3.00	.78		
19.	Examiners understand how to complete each step of the examination process.	3.43	.60		
20.	Examiners understand that the Criteria are complex but not complicated. That is, the Criteria are complex because they consist of several parts, which are linked holistically, but they are not complicated because they can be understood and explained.	3.14	.79		
21.	Examiners get a glimpse of the judging process so that they understand the effect of their work.	2.10	.77		
22.	Examiners learn to identify best practices.	2.43	.81		
23.	Examiners learn to prepare for site visits.	3.00	.95		
24.	Examiners need to identify only the scoring band for consensus.	2.81	.98		
25.	Examiners need to understand the consensus process and how it affects the score.	3.43	.60		
26.	Examiners must understand the site visit, what it is for, how to ask questions, how to **document** findings, how those findings clarify/verify site visit issues, and how the findings should be the basis for their conclusions to resolve the site visit issues.	3.38	.74		

Ranking: **4: essential, 3: important,** but not essential, **2: helpful,** but not important, **1: unimportant,** should not be included

Instructions for Table D-2

Best Practices Suggested by the Delphi Panel

I have provided the Delphi panel mean and standard deviation for the best practices that were new in round 2. I have also added your individual ranking. If, after reviewing your ranking in light of the Delphi panel item means, you want to change how you ranked an item, please put your new rank in the 'New Rank' column. If you do not want to change your response, you can leave the 'New Rank' column blank. I think I have adjusted the formatting of the 'New Rank' column so that you can easily input any changes. If, however, you have trouble inputting your new rank, please feel free to expand the column width, or play with the ruler, or do anything else that will allow you to input the number.

The operational definition of best practice is "an effective technique for training examiners. It answers the question 'how' and describes a process." While I know all of you are experts and understand the meaning of best practice, please use this definition if it helps you in deciding on a rank.

TABLE D-2. Best Practices Suggested by the Delphi Panel

	Best Practices	Mean	Standard Deviation	Your Rank Round 2	New Rank
1.	Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.	3.00	.71		
2.	Examiners train with their actual team using the real application to learn how to be an examiner instead of a case study document. This means examiner teams assigned to an application learn and work together on the actual application.	2.33	.97		
3.	Examiners use a web-based "Examiner Depot" method to share their work during training as well as all assessment stages.	2.48	.93		
4.	Examiners participate in Virtual Examiner Trainings.	2.05	.74		
5.	New examiners participate in Virtual Orientations for New Examiners to guide them in the pre-work process.	2.67	.80		
6.	Examiners work on their pre-work together with a trainer in Pre-work Labs in computer rooms.	2.10	.77		
7.	Examiners are matched with their team during training.	2.38	.67		
8.	Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a Process and a Results Item.	3.10	.94		
9.	New examiners receive training with their pre-workshop assignment; they walk through the assignment, practice and complete one Process and Results Item.	2.90	.89		
10.	Pre-workshop individual review of application does not require scoring as scoring is taught in the initial training workshop.	2.38	.74		
11.	Examiners learn good/bad examples of comments and key themes; they must evaluate these against the Criteria for effective comments.	3.14	.73		
12.	Examiners learn to use an evaluation worksheet as a way to organize and standardize individual review of an application.	2.57	.75		
13.	Examiners experience the various tasks required in the various phases of the application process.	3.20	.77		
14.	Examiner training occurs at different times in the year as applicants apply throughout the year.	2.14	1.15		
15.	Examiners participate in an exercise in which each examiner synthesizes the comments of four other examiners and prepares a draft set comments.	3.00	.84		
16.	Examiners participate in an exercise in which they formulate site visit issues and interview questions using the applicant's terms.	2.90	.89		
17.	Examiners are put in triads each day where experienced examiners coach new examiners.	2.62	.97		
18.	Examiners work on real applications, and use the case study only as an example of how everything works together and provides examples of well written comments and key themes.	2.52	.98		
19.	Each step of the examination process is well defined in sequential order.	3.43	.87		
20.	Trainers develop and deliver the entire training program for consistency.	2.90	1.14		

Ranking: **4: essential, 3: important,** but not essential, **2: helpful,** but not important, **1: unimportant,** should not be include

Instructions for Table D-3

Essential Best Practices for Teaching Essential Core Competencies (attached Excel spreadsheet)

On the accompanying Excel spreadsheet please **place an 'X' in the blue colored cell when you believe the best practice listed is, in fact, a best practice for teaching the given core competency.** The operational definition of **best practice in teaching a core competency** is "an effective technique for training examiners a skill they need to effectively evaluate and score an application." In other words, it is a process for actualizing a skill. **Please note that a best practice may be used for several core competencies. On the other hand, you may determine that a particular best practice does not fit with any of the core competencies.** I have worded the statements so that each core competency finishes a sentence which each best practice begins. In this way each '**X**' means that you believe the statement starting with a best practice and ending with a core competency is true.

For example, in the table below, the **X** corresponding to the cell BP1 – CC5 means that the best practice of "Having each step in the examination process be well-defined in sequential order" is an effective technique for training examiners how to write Opportunities for Improvement (OFIs). Similarly, the **X** in cell BP2 – CC5 means that "Having examiners work in teams to review and improve item comments" is an effective technique for training examiners the skill of writing OFIs. The table with the example follows.

	BP 1 Mean 3.43 Having each step of the examination process be well-defined in sequential order *is an effective technique for training*	**BP 2 Mean 3.38** Having examiners work in teams to review and improve item comments *is an effective technique for training*
CC 2 Mean 3.86 examiners to have a full understanding of the importance of the organizational profile in setting the context for the way the organization operates.		
CC 5 Mean 3.81 examiners to learn to write Opportunities for Improvement (OFIs).	**X**	**X**

For your ease in working with the matrix, I used an Excel spreadsheet so that you can scroll over and down always having in view the corresponding BP's and CC's. (The CC's are repeated in the far right hand column to facilitate your viewing each of the BP's in light of each of the CC's.) If you have any trouble working with the spreadsheet, please call or email me.

APPENDIX E

ROUND 4 SURVEY OF CORE COMPETENCIES AND BEST PRACTICES IN STATE BALDRIGE EXAMINER TRAINING PROGRAMS

Dear:

First, let me thank you again for your participation in the study and for your important input. I appreciate the time and effort that you are providing, and I am confident that our combined work will provide valuable insight to the training of state Baldrige examiners.

This fourth round of the survey seeks to further refine the expert panel's perspective of the essentiality of the core competencies and best practices in the **initial** state Baldrige **examiner training programs prior to consensus**. As you know, the purpose of this research is the development of a template for training examiners based on best practices for teaching the core competencies. This template will be available for your use.

The following paragraphs give an overview of the three tables in this final round of the survey. Following this overview of the data in each of the following tables, specific instructions for the Delphi panel's responses to each table will be given.

There was more than a 15% change between Rounds 2 and 3 in some of the item responses for the ranks of the core competencies and best practices which the panel introduced for inclusion in Round 2 and which the panel had an opportunity to reevaluate and change in Round 3 after reviewing the Round 2 Delphi panel mean for each core competency and best practice rank. Changes in rank responses which are greater than 15% suggest that there in not consensus across the Delphi panel. Consequently, this last round provides a final opportunity to determine panel consensus or lack of panel consensus. Therefore, the **core competencies** which had more than a 15% change in rank responses appear in Table E-1 of this round (Round 4) for review, and the **best practices** which had more than a 15% change in rank responses appear in Table E-2 of this round for review. That is, the panel has the opportunity in this round to review his or her individual ranking in light of the panel's overall ranking to determine whether to keep his or her ranking from Round 3 or to change it.

Table E-3 of this round is a Word Table which is a compilation of the Excel worksheet the panel completed in Round 3. It is a simplification of the Excel worksheet in which the panel is asked to rank the best practices for teaching core competencies using a scale of 1 – 4. The format is similar to the format of the other tables with which the panel has been working throughout the rounds.

Instructions for each of the tables precede the respective table. For Tables E-1 and E-2, you will be using the same ranking system of numbers 1 – 4 as you used in the previous rounds of the survey. These numbers have the following working definitions:

4 represents a core competency or best practice which is **essential** in the training of examiners;
3 represents a core competency or best practice which is **important but not essential** in the training of examiners;
2 represents a core competency or best practice which is **helpful but not very important** in the training of examiners;
1 represents a core competency or best practice which is **unimportant and should not be included** in the training of examiners.

For Table E-3 the working definitions for ranks 1 – 4 are provided in the instructions that precede the table.

You are welcome to write comments in an email or at the beginning or end of the survey. In order to complete the survey if you are using email, please save the attachments and return the completed, saved survey via email. Should you have any questions or need to contact me, my email is sandrabryant8@msn.com.

Thank you for your continued participation in this important project.

Instructions for Table E-1

Core Competencies Suggested by the Delphi Panel

I have provided the Round 3 Delphi panel mean and standard deviation for the core competencies that were new in Round 2 and which did not attain consensus in Round 3, where consensus means less than a 15% change in the response. I have also added your individual rankings. If, after reviewing your ranking in light of the Delphi panel item mean, you want to change how you ranked an item, please put your new rank in the 'New Rank' column. If you do not want to change your response, you can leave the 'New Rank' column blank. I think I have adjusted the formatting of the 'New Rank' column so that you can easily input any changes. If, however, you have trouble inputting your new rank, please feel free to expand the column width, or play with the ruler, or do anything else that will allow you to input the number.

The operational definition of core competency is "a skill needed by examiners to effectively evaluate and score an application. It answers the question 'what' and describes an outcome." While I know all of you are experts and understand the meaning of core competency, please use this definition if it helps you in deciding on a rank.

TABLE E-1. Core Competencies Suggested by the Delphi Panel

Core Competencies	Mean Round 3	Standard Deviation Round 3	Your Rank Round 3	New Rank
1. Examiners know how to write comments that tie the feedback messages from the examiner back to the criteria, organizational profile, key factors, and key processes and results.	3.95	.23		
2. Examiners learn to include "so whats" for both strengths and OFI's.	2.89	.74		
3. Examiners leave the training with a sense of confidence in their ability to perform successfully as examiners.	3.11	.46		
4. Examiners exhibit a sense of commitment to the process.	3.47	.51		
5. Examiners get a glimpse of the judging process so that they understand the effect of their work.	2.11	.57		
6. Examiners learn to prepare for site visits.	3.21	.86		
7. Examiners need to identify only the scoring band for consensus.	2.63	.76		

Ranking: **4: essential, 3: important,** but not essential, **2: helpful,** but not important, **1: unimportant,** should not be included

Instructions for Table E-2

Best Practices Suggested by the Delphi Panel

I have provided the Round 3 Delphi panel mean and standard deviation for the best practices that were new in round 2 and which did not attain consensus in Round 3, where consensus means less than a 15% change in the response. I have also added your individual rankings. If, after reviewing your ranking in light of the Delphi panel item mean, you want to change how you ranked an item, please put your new rank in the 'New Rank' column. If you do not want to change your response, you can leave the 'New Rank' column blank. I think I have adjusted the formatting of the 'New Rank' column so that you can easily input any changes. If, however, you have trouble inputting your new rank, please feel free to expand the column width, or play with the ruler, or do anything else that will allow you to input the number.

The operational definition of best practice is "an effective technique for training examiners. It answers the question 'how' and describes a process." While I know all of you are experts and understand the meaning of best practice, please use this definition if it helps you in deciding on a rank.

TABLE E-2. Best Practices Suggested by the Delphi Panel

Best Practices	Mean Round 3	Standard Deviation Round 3	Your Rank Round 3	New Rank
1. Examiners participate in Virtual Examiner Trainings.	2.21	.63		
2. Examiners work on their pre-work together with a trainer in Pre-work Labs in computer rooms.	1.95	.78		
3. Examiners are matched with their team during training.	2.16	.69		
4. New examiners receive training with their pre-workshop assignment; they walk through the assignment, practice and complete one process and results Item.	3.0	.67		
5. Examiners learn to use an evaluation worksheet as a way to organize and standardize individual review of an application.	2.53	.70		
6. Examiners experience the various tasks required in the various phases of the application process.	3.11	.66		
7. Examiners are put in triads each day where experienced examiners coach new examiners.	2.63	.68		
8. Examiners work on real applications, and use the case study only as an example of how everything works together and provides examples of well written comments and key themes.	2.63	.90		
9. Each step of the examination process is well defined in sequential order.	3.42	.77		

Ranking: **4: essential, 3: important,** but not essential, **2: helpful,** but not important, **1: unimportant,** should not be included

Instructions for Table E-3

Ranking of Best Practices for Core Competencies

The next table (also a Word Table) is a compilation of the Excel worksheet the panel responded to in Round 3. The associations of core competencies (CC) with best practices (BP) which had at least 10 responses from the panel are the ones which are included in the table below for ranking. That is, if at least 10 panel members considered a particular best practice to apply to a particular core competency then that association of best practice with core competency appears in the table below for ranking on a scale of 1 – 4. The question that can be asked to determine the ranking is, **"To what extent should this be considered a best practice for teaching this core competency?"** The meaning of the ranking numbers can be found below. Please use the following operational definition of best practice in teaching a core competency: "an effective technique for training examiners a skill they need to effectively evaluate and score an application." Please place your rank for each of the items below in the column which reads, "Ranking 1 – 4."

While every CC has been included for information, but where no BP was identified by at least 10 of the Delphi panel members, no rank for these CCs is needed. Where at least 10 Delphi panel members did associate a BP with a given CC, you are now asked to rank that association on a scale from 1 – 4. For example, you are asked to rank BP2 as to your perceived level of effectiveness for training CC4. The numbers 1 – 4 have the following working definitions:

4 indicates the given BP is **very effective** for training the given CC;
3 indicates the given BP is **moderately effective** for training the given CC;
2 indicates the given BP is **minimally effective** for training the given CC;
1 indicates the given BP is **ineffective** for training the given CC.

TABLE E-3. Ranking of Best Practices for Core Competencies

Core Competency	Best Practice	Number of Delphi panelists who in Round 3 (Excel Matrix) checked this as a BP for this CC	Comments	Rank 1 - 4
1. Examiners meet deadlines.			No best practice received more than 8 responses and thus could not be reliably associated with this core competency.	No rank needed
2. Examiners have a full understanding of the importance of the organizational profile in setting the context for the way the organization operates.			No best practice received more than 7 responses and thus could not be reliably associated with this core competency.	No rank needed
3. Examiners abide by the Conflict of Interest and Code of Conduct rules.			No best practice received more than 3 responses and thus could not be reliably associated with this core competency.	No rank needed
4. Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results.	2. Examiners work in teams to review and improve item comments.	10	This core competency is associated with 5 best practices. Thus the core competency is repeated for each of those best practices in this table.	
4. Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results.	4. Examiners learn good/bad examples of comments and key themes in order to evaluate these against the Criteria for effective comments.	14		
4. Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results.	5. Examiners work in teams to review individual comments and scoring, agrees on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.	13		
4. Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results.	6. Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.	11		
4. Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results.	7. Examiners participate in an exercise in which each examiner synthesizes the comments of four other examiners and prepares a draft set of comments.	11		

TABLE E-3. Continued

Core Competency	Best Practice	Number of Delphi panelists who in Round 3 (Excel Matrix) checked this as a BP for this CC	Comments	Rank 1 - 4
5. Examiners learn to write opportunities for improvement (OFIs).	2. Examiners work in teams to review and improve item comments.	11	This core competency is associated with 5 best practices. Thus the core competency is repeated for each of those best practices in this table.	
5. Examiners learn to write opportunities for improvement (OFIs).	4. Examiners learn good/bad examples of comments and key themes in order to evaluate these against the Criteria for effective comments.	14		
5. Examiners learn to write opportunities for improvement (OFIs).	5. Examiners work in teams to review individual comments and scoring, agrees on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.	11		
5. Examiners learn to write opportunities for improvement (OFIs).	6. Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.	11		
5. Examiners learn to write opportunities for improvement (OFIs).	7. Examiners participate in an exercise in which each examiner synthesizes the comments of four other examiners and prepares a draft set of comments.	10		
6. Examiners learn to relate specific key factors to Criteria items.			No best practice received more than 9 responses and thus could not be reliably associated with this core competency.	No rank needed
7. Examiners learn to write strengths.	2. Examiners work in teams to review and improve item comments.	10	This core competency is associated with 5 best practices. Thus the core competency is repeated for each of those best practices in this table.	
7. Examiners learn to write strengths.	4. Examiners learn good/bad examples of comments and key themes in order to evaluate these against the Criteria for effective comments.	13		
7. Examiners learn to write strengths.	5. Examiners work in teams to review individual comments and scoring, agrees on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.	10		

TABLE E-3. Continued

Core Competency	Best Practice	Number of Delphi panelists who in Round 3 (Excel Matrix) checked this as a BP for this CC	Comments	Rank 1 - 4
7. Examiners learn to write strengths.	6. Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.	10		
8. Examiners understand the meaning of "how."	6. Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.	10		
9. Examiners understand the Criteria are non-prescriptive and adaptable.	6. Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.	10		
10. Examiners learn to score within a range.	5. Examiners work in teams to review individual comments and scoring, agrees on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.	12		
11. Examiners understand that the focus in the results items is on the most critical organizational performance results.			No best practice received more than 9 responses and thus could not be reliably associated with this core competency.	No rank needed
12. Examiners learn to evaluate an application in terms of A/D/L/I or Le/T/C/Li/G's.	8. Examiners learn by using a case study in training.	10		
13. Examiners understand the importance of cross-references across categories.			No best practice received more than 9 responses and thus could not be reliably associated with this core competency.	No rank needed
14. Examiners understand a process for evaluating the application.	1. Each step of the examination process is well-defined in sequential order.	14	Two best practices are associated with this core competency.	
14. Examiners understand a process for evaluating the application.	3. Examiners experience the various tasks required in the various phases of the application process.	12		
15. Examiners are willing to ask for help and receive it.	6. Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.	13		
16. Examiners understand that the Criteria focus on results.			No best practice received more than 5 responses and thus could not be reliably associated with this core competency.	No rank needed

TABLE E-3. Continued

Core Competency	Best Practice	Number of Delphi panelists who in Round 3 (Excel Matrix) checked this as a BP for this CC	Comments	Rank 1 - 4
17. Examiners learn to verify the score/comment balance.	5. Examiners work in teams to review individual comments and scoring, agrees on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.	12	Two best practices are associated with this core competency.	
17. Examiners learn to verify the score/comment balance.	6. Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.	10		
18. Examiners understand how to complete each step of the examination process.	1. Each step of the examination process is well-defined in sequential order.	14	Three best practices are associated with this core competency.	
18. Examiners understand how to complete each step of the examination process.	3. Examiners experience the various tasks required in the various phases of the application process.	11		
18. Examiners understand how to complete each step of the examination process.	6. Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.	11		
19. Examiners understand that the Criteria support a systems perspective to maintaining organization-wide alignment.			No best practice received more than 9 responses and thus could not be reliably associated with this core competency.	No rank needed
20. Examiners understand the meaning of “what.”			No best practice received more than 8 responses and thus could not be reliably associated with this core competency.	No rank needed
21. Examiners know how to give targeted feedback comments that help the applicant move forward on its quality journey but with carefully constructed comments that are not too prescriptive.	4. Examiners learn good/bad examples of comments and key themes in order to evaluate these against the Criteria for effective comments.	13	Two best practices are associated with this core competency.	
21. Examiners know how to give targeted feedback comments that help the applicant move forward on its quality journey but with carefully constructed comments that are not too prescriptive.	5. Examiners work in teams to review individual comments and scoring, agrees on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.	11		
22. Examiners learn to write meaningful key factors.	8. Examiners learn by using a case study in training.	10		

TABLE E-3. Continued

Core Competency	Best Practice	Number of Delphi panelists who in Round 3 (Excel Matrix) checked this as a BP for this CC	Comments	Rank 1 - 4
23. Examiners consolidate comments to represent the findings of the team.	5. Examiners work in teams to review individual comments and scoring, agrees on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.	15	Two best practices are associated with this core competency.	
23. Examiners consolidate comments to represent the findings of the team.	7. Examiners participate in an exercise in which each examiner synthesizes the comments of four other examiners and prepares a draft set of comments.	15		
24. Examiners exhibit a sense of commitment to the process.			No best practice received more than 8 responses and thus could not be reliably associated with this core competency.	No rank needed
25. Examiners have a full understanding of the role the Criteria play in the improvement of overall organizational effectiveness and capabilities.			No best practice received more than 7 responses and thus could not be reliably associated with this core competency.	No rank needed
26. Examiners function effectively as team members.	2. Examiners work in teams to review and improve item comments.	13	Two best practices are associated with this core competency.	
26. Examiners function effectively as team members.	5. Examiners work in teams to review individual comments and scoring, agrees on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.	12		
27. Examiners listen to and learn from other team members.	2. Examiners work in teams to review and improve item comments.	12	Two best practices are associated with this core competency.	
27. Examiners listen to and learn from other team members.	5. Examiners work in teams to review individual comments and scoring, agrees on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.	12		
28. Examiners have a full understanding of the importance of the system operations (Categories 1-3 & 5-7) and the system foundation (Category 4).			No best practice received more than 8 responses and thus could not be reliably associated with this core competency.	No rank needed

TABLE E-3. Continued

Core Competency	Best Practice	Number of Delphi panelists who in Round 3 (Excel Matrix) checked this as a BP for this CC	Comments	Rank 1 - 4
29. Examiners have a full understanding of the Criteria structure with its subsets of Items and Areas to Address.	8. Examiners learn by using a case study in training.	10		
30. Examiners learn to write key themes.	4. Examiners learn good/bad examples of comments and key themes in order to evaluate these against the Criteria for effective comments.	12	Two best practices are associated with this core competency.	
30. Examiners learn to write key themes.	6. Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.	10		
31. Examiners understand the steps in the site visit process including how to identify site visit issues and how to develop site visit worksheets.	1. Each step of the examination process is well-defined in sequential order.	11	Two best practices are associated with this core competency.	
31. Examiners understand the steps in the site visit process including how to identify site visit issues and how to develop site visit worksheets.	3. Examiners experience the various tasks required in the various phases of the application process.	11		
32. Examiners leave with a sense of confidence in their abilities to perform successfully as examiners.	1. Each step of the examination process is well-defined in sequential order.	11	Three best practices are associated with this core competency.	
32. Examiners leave with a sense of confidence in their abilities to perform successfully as examiners.	3. Examiners experience the various tasks required in the various phases of the application process.	11		
32. Examiners leave with a sense of confidence in their abilities to perform successfully as examiners.	6. Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.	11		
33. Examiners understand that the Criteria are complex but not complicated. That is, the Criteria are complex because they consist of several parts which are linked holistically, but they are not complicated because they can be understood and explained.			No best practice received more than 9 responses and thus could not be reliably associated with this core competency.	No rank needed
34. Examiners have a full understanding of the role the Criteria play in contributing value to customers and stakeholders and organizational effectiveness and sustainability.			No best practice received more than 6 responses and thus could not be reliably associated with this core competency.	No rank needed

TABLE E-3. Continued

Core Competency	Best Practice	Number of Delphi panelists who in Round 3 (Excel Matrix) checked this as a BP for this CC	Comments	Rank 1 - 4
35. Examiners accurately apply "considerations for a small organization" as developed by NIST.			No best practice received more than 9 responses and thus could not be reliably associated with this core competency.	No rank needed
36. Examiners have a full understanding of the role the core values and concepts play in the Criteria.			No best practice received more than 7 responses and thus could not be reliably associated with this core competency.	No rank needed
37. Examiners understand how t complete each step of the examination process.	1. Each step of the examination process is well-defined in sequential order.	15	Three best practices are associated with this core competency.	
37. Examiners understand how to complete each step of the examination process.	3. Examiners experience the various tasks required in the various phases of the application process.	13		
37. Examiners understand how to complete each step of the examination process.	6. Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.	11		
38. Examiners learn to prepare for site visits.	1. Each step of the examination process is well-defined in sequential order.	11	Three best practices are associated with this core competency.	
38. Examiners learn to prepare for site visits.	3. Examiners experience the various tasks required in the various phases of the application process.	11		
38. Examiners learn to prepare for site visits.	6. Examiners receive coaching on their work as part of training from a coach that will remain with the team throughout the process.	10		
39. Examiners need to understand the consensus process and how it affects the score.	1. Each step of the examination process is well-defined in sequential order.	10	Three best practices are associated with this core competency.	
39. Examiners need to understand the consensus process and how it affects the score.	3. Examiners experience the various tasks required in the various phases of the application process.	11		
39. Examiners need to understand the consensus process and how it affects the score.	5. Examiners work in teams to review individual comments and scoring, agrees on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.	10		

TABLE E-3. Continued

Core Competency	Best Practice	Number of Delphi panelists who in Round 3 (Excel Matrix) checked this as a BP for this CC	Comments	Rank 1 - 4
40. Examiners understand the site visit, what it is for, how to ask questions, how to document findings, how those findings clarify/verify site visit issues, and how the findings should be the basis for their conclusions to resolve the site visit issues.	1. Each step of the examination process is well-defined in sequential order.	11	Two best practices are associated with this core competency.	
40. Examiners understand the site visit, what it is for, how to ask questions, how to document findings, how those findings clarify/verify site visit issues, and how the findings should be the basis for their conclusions to resolve the site visit issues.	3. Examiners experience the various tasks required in the various phases of the application process.	10		

Ranking: **4: very effective, 3: moderately effective, 2 minimally effective, 1 ineffective**

APPENDIX F

BALDRIGE SCORECARD

range. An organization's achievement level is based on a holistic view of either the four process or four results factors in aggregate and not on a tallying or averaging of independent assessments against each of the four factors. Assigning the actual score *within* the chosen range requires evaluating whether the Item response is closer to the statements in the next higher or next lower scoring range.

- A Process Item score of 50 percent represents an approach that meets the overall requirements of the Item, that is deployed consistently and to most work units, that has been through some cycles of improvement and learning, and that addresses the key organizational needs. Higher scores reflect greater achievement, demonstrated by broader deployment, significant organizational learning, and increased integration.

Process Scoring Guidelines

For Use with Categories 1–6

SCORE	PROCESS
0% or 5%	■ No SYSTEMATIC APPROACH to Item requirements is evident; information is ANECDOTAL. (A) ■ Little or no DEPLOYMENT of any SYSTEMATIC APPROACH is evident. (D) ■ An improvement orientation is not evident; improvement is achieved through reacting to problems. (L) ■ No organizational ALIGNMENT is evident; individual areas or work units operate independently. (I)
10%, 15%, 20%, or 25%	■ The beginning of a SYSTEMATIC APPROACH to the BASIC REQUIREMENTS of the Item is evident. (A) ■ The APPROACH is in the early stages of DEPLOYMENT in most areas or work units, inhibiting progress in achieving the BASIC REQUIREMENTS of the Item. (D) ■ Early stages of a transition from reacting to problems to a general improvement orientation are evident. (L) ■ The APPROACH is ALIGNED with other areas or work units largely through joint problem solving. (I)
30%, 35%, 40%, or 45%	■ An EFFECTIVE, SYSTEMATIC APPROACH, responsive to the BASIC REQUIREMENTS of the Item, is evident. (A) ■ The APPROACH is DEPLOYED, although some areas or work units are in early stages of DEPLOYMENT. (D) ■ The beginning of a SYSTEMATIC APPROACH to evaluation and improvement of KEY PROCESSES is evident. (L) ■ The APPROACH is in the early stages of ALIGNMENT with your basic organizational needs identified in response to the Organizational Profile and other Process Items. (I)
50%, 55%, 60%, or 65%	■ An EFFECTIVE, SYSTEMATIC APPROACH, responsive to the OVERALL REQUIREMENTS of the Item, is evident. (A) ■ The APPROACH is well DEPLOYED, although DEPLOYMENT may vary in some areas or work units. (D) ■ A fact-based, SYSTEMATIC evaluation and improvement PROCESS and some organizational LEARNING, including INNOVATION, are in place for improving the efficiency and EFFECTIVENESS of KEY PROCESSES. (L) ■ The APPROACH is ALIGNED with your organizational needs identified in response to the Organizational Profile and other Process Items. (I)
70%, 75%, 80%, or 85%	■ An EFFECTIVE, SYSTEMATIC APPROACH, responsive to the MULTIPLE REQUIREMENTS of the Item, is evident. (A) ■ The APPROACH is well DEPLOYED, with no significant gaps. (D) ■ Fact-based, SYSTEMATIC evaluation and improvement and organizational LEARNING, including INNOVATION, are KEY management tools; there is clear evidence of refinement as a result of organizational-level ANALYSIS and sharing. (L) ■ The APPROACH is INTEGRATED with your organizational needs identified in response to the Organizational Profile and other Process Items. (I)
90%, 95%, or 100%	■ An EFFECTIVE, SYSTEMATIC APPROACH, fully responsive to the MULTIPLE REQUIREMENTS of the Item, is evident. (A) ■ The APPROACH is fully DEPLOYED without significant weaknesses or gaps in any areas or work units. (D) ■ Fact-based, SYSTEMATIC evaluation and improvement and organizational LEARNING through INNOVATION are KEY organization-wide tools; refinement and INNOVATION, backed by ANALYSIS and sharing, are evident throughout the organization. (L) ■ The APPROACH is well INTEGRATED with your organizational needs identified in response to the Organizational Profile and other Process Items. (I)

- A Results Item score of 50 percent represents a clear indication of good levels of performance, beneficial trends, and appropriate comparative data for the results areas covered in the Item and *important* to the organization's business or mission. Performance projections are present for some high-priority results. Higher scores reflect better trends and levels of performance, stronger comparative performance, and broader coverage and integration with the requirements of the business or mission.

Baldrige Award applicants do not receive a single, final score as part of their feedback. They receive a scoring range for each Criteria Item, and they receive a score in two overall bands: one for Process Items and one for Results Items. The descriptors for these scoring bands portray the organization's overall progress and maturity in the process and the results dimensions. The Scoring Band Descriptors are available at www.baldrige.nist.gov/Examiner_Resources.htm.

Results Scoring Guidelines

For Use with Category 7

SCORE	RESULTS
0% or 5%	■ There are no organizational PERFORMANCE RESULTS and/or poor RESULTS in areas reported. (Le) ■ TREND data either are not reported or show mainly adverse TRENDS. (T) ■ Comparative information is not reported. (C) ■ RESULTS are not reported for any areas of importance to the accomplishment of your organization's MISSION. No PERFORMANCE PROJECTIONS are reported. (I)
10%, 15%, 20%, or 25%	■ A few organizational PERFORMANCE RESULTS are reported, and early good PERFORMANCE LEVELS are evident in a few areas. (Le) ■ Some TREND data are reported, with some adverse TRENDS evident. (T) ■ Little or no comparative information is reported. (C) ■ RESULTS are reported for a few areas of importance to the accomplishment of your organization's MISSION. Limited or no PERFORMANCE PROJECTIONS are reported. (I)
30%, 35%, 40%, or 45%	■ Good organizational PERFORMANCE LEVELS are reported for some areas of importance to the Item requirements. (Le) ■ Some TREND data are reported, and a majority of the TRENDS presented are beneficial. (T) ■ Early stages of obtaining comparative information are evident. (C) ■ RESULTS are reported for many areas of importance to the accomplishment of your organization's MISSION. Limited PERFORMANCE PROJECTIONS are reported. (I)
50%, 55%, 60%, or 65%	■ Good organizational PERFORMANCE LEVELS are reported for most areas of importance to the Item requirements. (Le) ■ Beneficial TRENDS are evident in areas of importance to the accomplishment of your organization's MISSION. (T) ■ Some current PERFORMANCE LEVELS have been evaluated against relevant comparisons and/or BENCHMARKS and show areas of good relative PERFORMANCE. (C) ■ Organizational PERFORMANCE RESULTS are reported for most KEY CUSTOMER, market, and PROCESS requirements. PERFORMANCE PROJECTIONS for some high-priority RESULTS are reported. (I)
70%, 75%, 80%, or 85%	■ Good to excellent organizational PERFORMANCE LEVELS are reported for most areas of importance to the Item requirements. (Le) ■ Beneficial TRENDS have been sustained over time in most areas of importance to the accomplishment of your organization's MISSION. (T) ■ Many to most TRENDS and current PERFORMANCE LEVELS have been evaluated against relevant comparisons and/or BENCHMARKS and show areas of leadership and very good relative PERFORMANCE. (C) ■ Organizational PERFORMANCE RESULTS are reported for most KEY CUSTOMER, market, PROCESS, and ACTION PLAN requirements, and they include some PROJECTIONS of your future PERFORMANCE. (I)
90%, 95%, or 100%	■ Excellent organizational PERFORMANCE LEVELS are reported for most areas of importance to the Item requirements. (Le) ■ Beneficial TRENDS have been sustained over time in all areas of importance to the accomplishment of your organization's MISSION. (T) ■ Evidence of industry and BENCHMARK leadership is demonstrated in many areas. (C) ■ Organizational PERFORMANCE RESULTS fully address KEY CUSTOMER, market, PROCESS, and ACTION PLAN requirements, and they include PROJECTIONS of your future PERFORMANCE. (I)

From: http://baldrige.nist.gov/PDF_files/2009_2010_Business_Nonprofit_Criteria.pdf

APPENDIX G

INTRODUCTION LETTER

Sandra E. Brooks Bryant

June 30, 2008

Dear:

I am delighted that you are willing to serve as an expert on a panel composed of instructors of examiner training programs at state Baldrige organizations. I am conducting a doctoral research project in Educational Administration at Texas A&M University. The purpose of my research is threefold: (1) to determine the core competencies needed by state Baldrige examiners, (2) to identify best practices in examiner training programs provided by state Baldrige organizations, and (3) to identify the best practices for teaching the core competencies. The outcome of this research will be to develop an Examiner Training Template based on essential core competencies and best practices. State Baldrige organizations can then use the template for training examiners in these competencies and best practices.

In terms of what is expected from you in agreeing to serve as an expert on this anonymous panel of experts, you will be ranking statements pertaining to the core competencies needed by state Baldrige examiners, the best practices in examiner training programs, and the best practices for teaching the core competencies. For example, you would rank the ability of examiners to learn to write comments on a 4-point scale as being essential, important, helpful, or unimportant.

The first round of the survey will deal with core competencies and best practices. The remaining three rounds will add statements from the expert panel regarding the best practices for teaching core competencies.

The study is utilizing a Delphi Panel, which is a group of experts whose opinions are treated anonymously. The purpose of the Delphi technique is to gain consensus from a panel of experts on the relative importance of the items being considered. Consensus refers to a change of less than 15% in the responses. In other words, if the change in an item on the survey is 15% or more then that item will remain for the next round in the survey.

In terms of your commitment, each of the four rounds should take no more than one-half hour of your time to complete. I would appreciate your returning your response for each round within 2 weeks of receipt. Depending on the rate of return and the number of items that need modifying, my goal is to get the next round to you within 2 weeks of receiving all the responses for a given round.

However, there may be unforeseen circumstances that may delay each round. We will suspend work for the month of August. For your planning purposes this is the schedule I hope to follow. I want to be sensitive to your schedule as well, so please let me know if you anticipate any problems. As the outcome will be a training template designed to improve state Baldrige examiner training programs, it is hoped that you will recoup the time you spend on the survey in being able to learn from this experience and utilize the template to inform your state's examiner training program. Your perspective as an expert on these issues is highly valued and will add significantly to the worth of the study.

Know that I greatly appreciate your serving on this Delphi Panel. I am providing my phone number and email address at the bottom of this correspondence. Do feel free to call or email any questions you have as well as your response as to whether or not you can participate as an expert on the Delphi Panel. Also please indicate whether you would prefer me to email a Word attachment of the survey or send the survey to you by US Mail. If you choose email, then you will need to save the Word document with your answers and email it back as an attachment. It would be helpful if you could provide me with your preference within one week of receipt of this letter.

Again, thank you for choosing to be an expert in helping create a best practices training template for examiners.

Warm regards,

Sandra E. Brooks Bryant
Email: sandrabryant8@msn.com

APPENDIX H

TRANSMITTAL E-MAIL

Sandra E. Brooks Bryant

June 14, 2008

Dear:

Thank you for agreeing to participate in my doctoral study on core competencies and best practices in state Baldrige examiner training programs. I appreciate your commitment. The purpose of my research is threefold: (1) to determine the core competencies needed by state Baldrige examiners, (2) to identify best practices in examiner training programs provided by state Baldrige organizations, and (3) to identify the best practices for teaching the core competencies. The outcome of this research will be to develop an Examiner Training Template that reflects best practices.

In terms of what is expected if you agree to serve as an expert on this anonymous panel of experts, you will be identifying and ranking statements pertaining to the core competencies needed by state Baldrige examiners, the best practices in examiner training programs, and the best practices for teaching the core competencies. For example, you would rank the ability of examiners to learn to write comments on a 4-point scale as being essential, important, helpful, or unimportant.

The first round of the survey will deal with core competencies and best practices. The remaining three rounds will add statements from the expert panel regarding the best practices for teaching core competencies. For rounds 2, 3, and 4, I will give you the mean, standard deviation for each item along with your individual score, which you will be asked to review in light of the panel mean. You will then have the opportunity to change your score if you choose.

The study is utilizing a Delphi Panel, which is a group of experts whose opinions are treated anonymously. The purpose of the Delphi technique is to gain consensus from a panel of experts on the relative importance of the items being considered. Consensus refers to a change of less than 15% in the responses. In other words, if the change in an item on the survey is 15% or more then that item will remain for the next round in the survey.

In terms of your commitment should you elect to participate as an expert, each of the four rounds should take no more than one-half hour of your time to complete depending on how many items are added for consideration in the next round. I would appreciate your returning your response for each round within 2 weeks of receipt. Depending on the rate of return and the number of items that

need modifying, my goal is to get the next round to you within 2 weeks of receiving all the responses for a given round. However, there may be unforeseen circumstances that may delay each round. If we are not through with the rounds by early August, we will resume at the beginning of September. For your planning purposes this is the schedule I hope to follow. I want to be sensitive to your schedule as well, so please let me know if you anticipate any problems. As the outcome will be a training template designed to improve state Baldrige examiner training, it is hoped that you will recoup the time you spend on the survey in being able to learn from this experience and utilizing the template to inform your state's examiner training program.

Attached to this email is the Information Sheet required by the Institutional Review Board to ensure compliance with federal guidelines for research. The information on this sheet is designed so that both you and I understand the parameters under which the research will be conducted. Please review this information sheet and contact me if you have any questions or need clarification.

Attached also is first round of the Delphi Panel survey that is being utilized to obtain your expert perspective of the core competencies and best practices in state Baldrige examiner training programs. The instructions for completing the survey are also attached.

APPENDIX I

INFORMATION SHEET

Core competencies and Best Practices in Examiner Training in State Baldrige Organizations: A Delphi Study

Introduction

The purpose of this form is to provide you (as a prospective research study participant) information that may affect your decision as to whether or not to participate in this research.

You have been asked to participate in a research study out of which will emerge a set of best practices for teaching core competencies to examiners of state Baldrige organizations. The purpose of this study is to identify core competencies needed by state Baldrige examiners, best practices in examiner training programs, and best practices for teaching core competencies in state Baldrige organizations. You were selected to be a possible participant because you have served as an instructor for at least three years, have served as either a feedback writer or team leader for at least one year, have served as either a state or national level Baldrige examiner for at least two years, and have been on at least one site visit.

What will I be asked to do?
If you agree to participate in this study, you will be asked to complete a survey with statements about core competencies needed by examiners, best practices in the training program, and best practices for teaching core competencies. There will be three to four rounds in the survey. You will be able to contribute your own ideas. You will have two weeks to complete each round; there will be at least two weeks in between rounds. Each round should take no more than one-half hour of your time.

What are the risks involved in this study?
The risks associated with this study are minimal, and are not greater than risks ordinarily encountered in daily life.

What are the possible benefits of this study?
You will receive no direct benefit from participating in this study; however, the template for examiner training, which will be the outcome of the research, will benefit your organization as well as other state Baldrige organizations.

Do I have to participate?
No. Your participation is voluntary. You may decide not to participate or to withdraw at any time without your current or future relations with Texas A&M University being affected.

Who will know about my participation in this research study?
This study is anonymous.
The records of this study will be kept private. No identifiers linking you to this study will be included in any sort of report that might be published.

Whom do I contact with questions about the research?
If you have questions regarding this study, you may contact Sandra Brooks Bryant, (sandrabryant8@msn.com).

Whom do I contact about my rights as a research participant?
This research study has been reviewed by the Human Subjects' Protection Program and/or the Institutional Review Board at Texas A&M University. For research-related problems or questions regarding your rights as a research participant, you can contact these offices at (979)458-4067 or irb@tamu.edu.

Participation
Please be sure you have read the above information, asked questions and received answers to your satisfaction. If you would like to be in the study, I will e-mail the surveys individually with detailed directions to each of you asking you to rank statements on a 4-point Likert-type scale regarding the training of state Baldrige examiners. You may add statements of your own which will be included in the next round of statements.

APPENDIX J

CONSIDERATIONS FOR REVIEWING SMALL ORGANIZATIONS

All applicants are reviewed in the context of their individual key factors. In the case of small organizations, size is a significant key factor. While an organization's size does not affect the applicability of the Baldrige Criteria, it does need to be factored into the assessment of an applicant's responses in its Baldrige Award application. Therefore, Examiners with large-organization frames of reference should be careful not to apply operational and procedural requirements as they review small organization applications.

Some guidelines are given below for understanding the context for reviewing a small organization:

- Small organization applicants are defined as those with 500 or fewer employees. Also noteworthy is the significant difference in resource availability between a 450-person organization and a 50-person organization.
- Social responsibility and community involvement must be viewed in the context of the applicant's size. A large organization might have impacts on a national or international basis; a small organization will frequently focus its involvement on a local community.
- The issues of fiscal and managerial accountability, ethical behavior, and legal compliance are as pertinent to a small organization as they are to a large one, and the responses of management to these issues are equally important. A small organization, however, will necessarily address these issues in the context of its size, ownership (many are privately held or family-owned), and responsibilities. Good governance practices are still an imperative.
- While large organizations frequently have complex computer/information systems for data management, a small organization (depending upon how small) may perform data and information management with a combination of personal computer- or work station-based data management systems and manual methods.
- Due to limited workforce and funding resources, benchmarking and competitive comparison information in a small organization environment may be based largely on literature/trade association information and comparisons with best practices in the local geographic area.
- In the context of a small organization, systems for workforce involvement and process management may rely more on informal verbal communication than on formal written communication and documentation. However, all applicants have the same requirement to demonstrate that their processes are repeatable, can produce the

desired results, and are deployed fully and systematically throughout the organization.

- The ability of a small organization to leverage key suppliers, particularly large suppliers, has to be viewed in the context of workforce availability and the volume of business that it does with the supplier.
- The ability of a small organization to obtain customer and market knowledge through independent third-party surveys, commissioned studies, extensive interviews, or focus group techniques is limited by its resources. The important consideration for Examiners is to assess whether the applicant, given its resources, is using appropriate mechanisms to gather and use information to improve its customer and market focus and satisfaction.
- The expectation that large organizations will segment their results data with regard to various customer and workforce segments may require modification in small organizations, depending on the complexity of these groups and the level of resources needed to gather and analyze the data.

APPENDIX K

THE IMPACT OF OUTLIERS

It is interesting to note that with regard to the Round 4 ranking of best practices for teaching core competencies, there were two panelists who were the only ones who ranked twelve items as 1. One panelist explained that writing comments and key themes and tying them to the Criteria is a skill honed over several years. He continued that for this reason he had difficulty assigning a rank to those items. For ten of the fifty-one items the means would have moved enough so that the items would have changed categories from moderately effective to very effective as Table K-1 illustrates. Table K-1 shows both the actual means and standard deviations as they appeared in Table 22 of Chapter IV and the means and standard deviations with the two outliers removed for the ten items which would have changed categories from moderately effective to very effective. Items whose mean is 3.50 or greater are considered very effective.

In summary, it is important that these two outliers and their impact on the overall rankings be noted and be considered by state programs in evaluating potential best practices for teaching core competencies for improving examiner training. The numbering in the table below reflects the numbering in Table 22 of Chapter IV.

TABLE K-1. Comparison of Means and Standard Deviations of Consensed Best Practices for Teaching Core Competencies (Full panel results vs. results with outliers removed) Round 4 Results

Core Competency	Best Practice	Actual Mean and Standard Deviation Round 4 Results	Mean and Standard Deviation Round 4 Results with Outliers Removed
1. Examiners understand a process for evaluating the application.	Each step of the examination process is well-defined in sequential order.	3.44 .70	3.63 .50
2. Examiners learn to write opportunities for improvement (OFIs).	Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.	3.44 .98	3.75 .45
3. Examiners know how to write comments that tie the feedback messages from the examiner back to the Criteria, organizational profile, key factors, and key processes and results.	Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.	3.39 .98	3.69 .48
7. Examiners function effectively as team members.	Examiners work in teams to review and improve item comments.	3.28 .83	3.50 .52
8. Examiners know how to give targeted feedback comments that help the applicant move forward on its quality journey but with carefully constructed comments that are not too prescriptive.	Examiners learn good/bad examples of comments and key themes in order to evaluate these against the Criteria for effective comments.	3.28 .96	3.56 .51
9. Examiners listen to and learn from other team members.	Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.	3.28 .96	3.56 .51

TABLE K-1. Continued

Core Competency	Best Practice	Actual Mean and Standard Deviation Round 4 Results	Mean and Standard Deviation Round 4 Results with Outliers Removed
11. Examiners learn to write strengths.	Examiners learn good/bad examples of comments and key themes in order to evaluate these against the Criteria for effective comments.	3.28 1.02	3.56 .63
12. Examiners consolidate comments to represent the findings of the team.	Examiners participate in an exercise in which each examiner synthesizes the comments of four other examiners and prepares a draft set of comments.	3.28 1.02	3.50 .82
15. Examiners function effectively as team members.	Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.	3.22 .94	3.50 .52
16. Examiners learn to score within a range.	Examiners work in teams to review individual comments and scoring, agree on the important strengths and OFIs, write comments and reach consensus on scoring for a process and a results item.	3.22 1.00	3.50 .63

Ranking: **4: very effective, 3: moderately effective, 2 minimally effective, 1 ineffective**

VITA

SANDRA ELOISE BROOKS
Department of EAHR
c/o Dr. Bryan Cole
Texas A&M University
College Station, Texas 77843-4226

EDUCATION

Ph.D. Educational Administration from Texas A&M University; 2010

M.S. Geophysics from Texas A&M University; 1990

B.S. Geophysics from Texas A&M University; 1984

B.A. Psychology from Vanderbilt University; 1973

PROFESSIONAL EXPERIENCE

- Examiner for Quality Texas, a State Baldrige Foundation; Volunteer Position; 2006-2008
- Blinn College; 1994 – 2004
- Assistant Division Chair, Natural Sciences; Fall, 2002 – Summer, 2003
- Coordinator, Geology Department; Spring, 1995 – Spring, 2002
- Instructor, Geology Department; Spring, 1995 – Spring, 2004
- Instructor, Physics Department; Summer, 1994 and Summer, 1995
- Lecturer, Mathematics Department at Texas A&M University; Fall, 1994
- Teacher, St. Michael's Episcopal School; Fall, 1993 – Spring, 1994

ACADEMIC AND RESEARCH INTERESTS

- Course in Emotional Mastery
- Course in Determining a Major
- Dissertation – A Delphi Panel Study of the Examiner Training Program in State Baldrige Organization